

undergraduate
calendar
2001 > 2002



Concordia
UNIVERSITY

real
education
for the real world

University Mailing Addresses

Sir George Williams Campus

1455 de Maisonneuve Blvd W.
Montréal, Québec
H3G 1M8

Loyola Campus

7141 Sherbrooke St. W.
Montréal, Québec
H4B 1R6

Web Address

<http://www.concordia.ca>

Communication of Information to Provincial Ministry of Education

Under the terms of an agreement between Concordia University and the provincial Ministry of Education, approved by the Québec Access to Information Commission, Concordia University is required to transmit to the Ministry some or all of the following information concerning its students: the student's permanent code, complete name, date of birth, gender, father's complete name, mother's complete name and place of birth. This information is being transmitted, at the Ministry's request, in order to provide the Ministry with the tools to properly calculate funding for Concordia University, for planning purposes and to ensure the proper management of public funds.

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undergraduate calendar

CONCORDIA UNIVERSITY'S MISSION STATEMENT

Concordia is an urban university which is responsive to the needs of a diverse student population as well as to the bilingual and multicultural environment in which it resides. It is a welcoming community where values of equality, non-discrimination and tolerance of diversity are appreciated and actively promoted. Furthermore, Concordia is committed to responsible and innovative leadership in fulfilling the mission of universities to develop and disseminate knowledge and values and to act as a social critic. The University seeks to achieve this end by offering its students inclusive and accessible academic programs which stress a broad-based, interdisciplinary approach to learning, as well as by a dedication to superior teaching supported by the best possible research, scholarship, creative activity and service to society. Through these means, the University prepares its graduates, at all levels, to live as informed and responsibly critical citizens who are committed to learning and to the spirit of enquiry.

2001 > 2002



The Calendar is an official University document defining academic programs and the regulations which pertain to them. It is accurate as of its printing date. The University Senate reserves the right to modify the academic programs and regulations at its discretion after the publication date of the Calendar. In addition, the University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of an academic term. The most current information is available from the Office of the Registrar and, for graduate programs, the School of Graduate Studies. Moreover, the information contained in the Calendar or any other University document related to academic programs and regulations is subject to verification and correction by the Office of the Registrar and the School of Graduate Studies.

- Not all courses listed in this Calendar are offered this year. Students are advised to consult the Undergraduate Class Schedule for a timetable of courses offered.
- On November 15, 2000, the Faculty of Commerce and Administration at Concordia University became the John Molson School of Business. Please note that this change may not be reflected in all sections of this Calendar at the time of printing.
- For information concerning graduate programs, contact the School of Graduate Studies — (514) 848-3800. The office is located at 2145 Mackay Street near the Hall Building.

Concordia University is a totally smoke free environment as of January 1, 1993. (Policy Manual C SR-3) Effective January 1996, offenders will be fined \$25 per infraction.

PRICE: \$7.00 plus postage and handling

Copies of the Calendar are available at Concordia bookstores.

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Concordia University is one of the largest urban universities in Canada. It has two campuses — one in downtown Montréal (Sir George Williams), the other in a residential setting in the city's west end (Loyola).

The University has long promoted accessibility, innovation and an interdisciplinary approach to learning as its fundamental characteristics. As an urban university, it is also responsive to Montréal's bilingual and multicultural environment, and has a strong tradition in part-time education.

Approximately 93% of Concordia's students are Canadians and 7% are International students. Approximately 15% of Concordia students list French as their mother tongue.

More than 4,400 students a year are granted degrees at the graduate and undergraduate levels. Over 500 students earn scholarships and fellowships.

Concordia employs about 2,600 people, both full-time and part-time, including 706 full-time professors, 790 part-time instructors (CUPFA only), and 26 professional librarians. Among the part-time instructors is a large number of professionals drawn from the artistic community and the business world.

For the 1998-99 fiscal year, the value of grants and contracts allotted to Concordia researchers is in the amount of 15.9 million dollars. Particularly active areas of research are Biology, Psychology, Electrical and Computer Engineering, Mechanical Engineering, and Computer Science. Other research strengths are Building Studies, Transportation Engineering, Cell and Molecular Biology, Behavioural Neurobiology, Human Development and Management Studies.

Concordia recognizes the increasing importance of international academic relations and it operates a Centre for International Academic Cooperation to encourage, monitor and co-ordinate the University's international activities. During the past decade, Concordia professors have travelled to more than 100 countries, and Concordia continues to play host to visiting students and professors from every corner of the globe. Formal linkages have been established with universities in Brazil, the People's Republic of China, France, Germany, Hong Kong, India, Israel, Japan, the Netherlands, Poland, Trinidad and Tobago, the United States and Zimbabwe. Research and study programs have also been held in Costa Rica, Great Britain, Greece, and Italy, among others.

The University holds the distinction of being the first in the western world to establish a joint doctoral program with a university in The People's Republic of China, and Concordia is still active in that country. Formal exchange programs have been established with eight of the PRC's leading academic institutions. As a consequence, Concordia professors now travel to China to teach PhD courses in Civil Engineering, Computer Science, and a growing array of other disciplines in the arts, sciences and engineering.

Concordia is the only English-language University in Québec with a Co-operative Education program, a process by which academic study terms are alternated with work terms in business and industry to give students practical, on-the-job experience. The areas of work experience included in the Concordia program are Accountancy, Biochemistry, Building Engineering, Chemistry, Civil Engineering, Computer Engineering, Computer Science, Economics, Electrical Engineering, Finance, French Translation, Human Resource Management, Industrial Engineering, Management Information Systems (MIS), Marketing, Mathematics, Mechanical Engineering, Physics, Software Engineering, and Statistics.

Established in 1974 with the merger of Loyola College and Sir George Williams University, Concordia offers more than 250 graduate and undergraduate programs in four Faculties (Arts and Science, Commerce and Administration, Engineering and Computer Science, and Fine Arts) and the School of Graduate Studies. At the undergraduate level, the University offers BAdmin, BA, BComm, BCompSc, BEd, BEng, BFA, and BSc degrees, as well as Certificate programs.

At the graduate level, the University awards MA, MSc, MTM, MBA, MASc, MCompSc, MEng, and MFA degrees.

Programs leading to the PhD degree are offered in Administration, Art Education, Art History, Biology, Building Studies, Chemistry, Civil Engineering, Communication, Computer Science, Economics, Educational Technology, Electrical and Computer Engineering, History, Humanities, Mathematics, Mechanical Engineering, Physics, Psychology, Religion, and in Special Individualized programs.

The following graduate certificate programs are offered: Cultural Affairs and Event Management, Community Organizational Development, Management Accountancy, Management of Health Care Organizations, Building Engineering, Environmental Engineering, Mechanical Engineering, and Software Systems for Mechanical and Aerospace Engineering.

The University also offers graduate diploma programs in Accountancy, Administration, Adult Education, Advanced Music Performance Studies, Art Education, Communication Studies, Computer Science, Economic Policy, Environmental Impact Assessment, Instructional Technology, Investment Management, Journalism, Sport Administration, and Translation.

Enrolment as of Fall 2000 was:

Full-time undergraduate	11,790	Full-time graduate	2,844
Part-time undergraduate	8,642	Part-time graduate	829
Independent students	2,365		

In addition to the programs described in this Calendar and in the School of Graduate Studies Calendar, the University offers a wide range of summer courses and programs on both campuses. A separate publication listing summer offerings is published annually.

Concordia is on the Internet with a Web site that allows visitors to learn all about the University. Options allow the user to access academic information, go on a tour of the libraries, locate campus activities, find information for students and about administrative services, search through the directory and sign the guestbook. Concordia's Web site address is <http://www.concordia.ca>.

Service Centre

Located in the J.W. McConnell Library Building, the Birks Student Service Centre is a one-stop service centre that provides integrated front-line Admissions, Student Accounts as well as all registrarial services. In addition, the Centre maintains a self-service touch-screen terminal for reports of standing. Other self-service applications available to students include CARL — Concordia Automated Response Line, a bilingual touch-tone system for grades and registration.

The Birks Student Service Centre also offers Campus Tours services. These include not only information on academic programs and university activities but also self-guided, general, and customized visits of both campuses.

Libraries

Concordia University has two libraries: the R. Howard Webster Library on the downtown Sir George Williams Campus and the Georges P. Vanier Library on the west-end Loyola Campus. Both libraries offer the same services; however, their collections differ in content, having reference and research collections which support the programs and courses offered on the respective campuses.

The Webster Library serves students in commerce and administration, fine arts, particularly the visual arts, humanities, social sciences including education, engineering and computer science, and the pure and applied sciences. The Vanier Library includes collections in some areas of commerce and administration, fine arts, particularly the performing arts, theatre and music, humanities, social sciences including communication studies, and certain sciences — mathematics, psychology, and exercise science.

Many electronic information services are available both in the libraries and by remote access from off-site computers. CLUES, the library information system, includes the catalogue of both libraries' collections. Students can also choose from an extensive list of bibliographic and full-text databases which provide references to periodical literature in most subject areas; many of these databases can be searched from off-campus computers having Internet access.

Librarians at the reference desk of each library can provide students with help in choosing library material for assignments and research. For specialized assistance, students may also consult subject librarians who are responsible for both selection and reference work within defined subject areas. Subject librarians also offer individual and group instruction in research methodology, emphasizing database searching. A schedule of library workshops offered each term may be picked up in either library, or found on the library Web site listed below.

Undergraduate students may borrow books for a two-week period. Audio-visual materials may have a shorter loan period. The libraries' interlibrary loan service facilitates document delivery and borrowing of materials from other libraries at the local, national or international level.

Complete information concerning the libraries' collections and services, including the names of subject librarians, is made available in print format in the libraries or in electronic format on the libraries' Web site at <http://library.concordia.ca>.

Instructional and Information Technology Services

Instructional and Information Technology Services (IITS) provides computing and audio-visual resources and services to students, researchers, the library, and the University administration. The Department maintains a high-speed data communications network which brings together the many buildings and the two campuses; this network is itself linked to the international community via the Internet. Available computing resources include several super-mini computers, extensive lab facilities offering 250 public access personal computers (150 Pentium and 486 level DOS machines, 100 Macintosh), Internet access, and specialized graphics equipment. A comprehensive software library is available including numerical analysis routines, statistical processing packages, database products, simulation languages, graphics support, all widely used computer languages, text processing, on-line news services and many other general purpose utilities. IITS provides around-the-clock computer access, with consulting services available during normal University operating hours. Newsletters and information sheets (*Info Notes*) detail these services and facilities, and are available at the service areas located on each campus.

IITS operates three audio-visual equipment depots, primarily responsible for media services in teaching areas, but also providing over-the-counter sales of materials and loan of equipment to students, faculty and staff.

The facilities in the IITS Learning Laboratories, media workshops (AVISTAs), television and sound studios, preview and presentation rooms, cinemas and media library, are also available to students, faculty and staff, on an individual basis, for self-instruction, training and the preparation of presentation materials.

Professional production services and consultation are available in the areas of video, sound, graphics, photography, computer controlled presentation and distance education.

The University is a member of the Québec educational television network, CANAL, which broadcasts a variety of credit and non-credit courses, lectures, seminars and interviews on UHF Channel 29 in the Montréal region and on Cable 23 in other areas of Québec.

Art Galleries

The Leonard and Bina Ellen Art Gallery is located in the J.W. McConnell Building. One of the major small museums in Canada, the Gallery features a year-round program of exhibitions of Canadian art in all visual media. Most presentations are organized by the Gallery's own staff, but some shows are brought in from other art institutions across Canada.

The Gallery has a permanent collection of Canadian art with a special emphasis on modern and contemporary work. The collection includes painting, sculpture, works on paper, mixed media and photography. Selections from the collection are frequently included in the Gallery's exhibitions. Illustrated bilingual publications accompany the majority of the exhibitions.

The V.A.V. Gallery, devoted to work by undergraduate students in the visual arts programs of the Faculty of Fine Arts, is located on the main floor of the Visual Arts Building at the corner of René-Lévesque Boulevard and Crescent Street. In the Bourget Building on Mountain Street, exhibitions of work by Fine Arts graduate students are presented in the gallery on the main floor.

Theatre, Music and Arts Studios

The Faculty of Fine Arts operates several performing arts facilities on the Loyola Campus, including a state-of-the-art concert hall, seating 600, and the Joseph P. Cazalet Studio, a flexible teaching facility serving theatre students. Dramatic productions on the Sir George Williams Campus are staged in the D.B. Clarke Theatre, a well equipped 380-seat facility in the Henry F. Hall Building.

Specialized studios and workshops for undergraduate and graduate students in the visual arts are located in the Visual Arts Building and the MF Annex.

Music students use ensemble rooms and practice studios in the Refectory Building on the Loyola Campus. Performances are given in the large ensemble rooms and in the Oscar Peterson Concert Hall. Dance and theatre students use studios in the TJ Annex, located on the Loyola Campus.

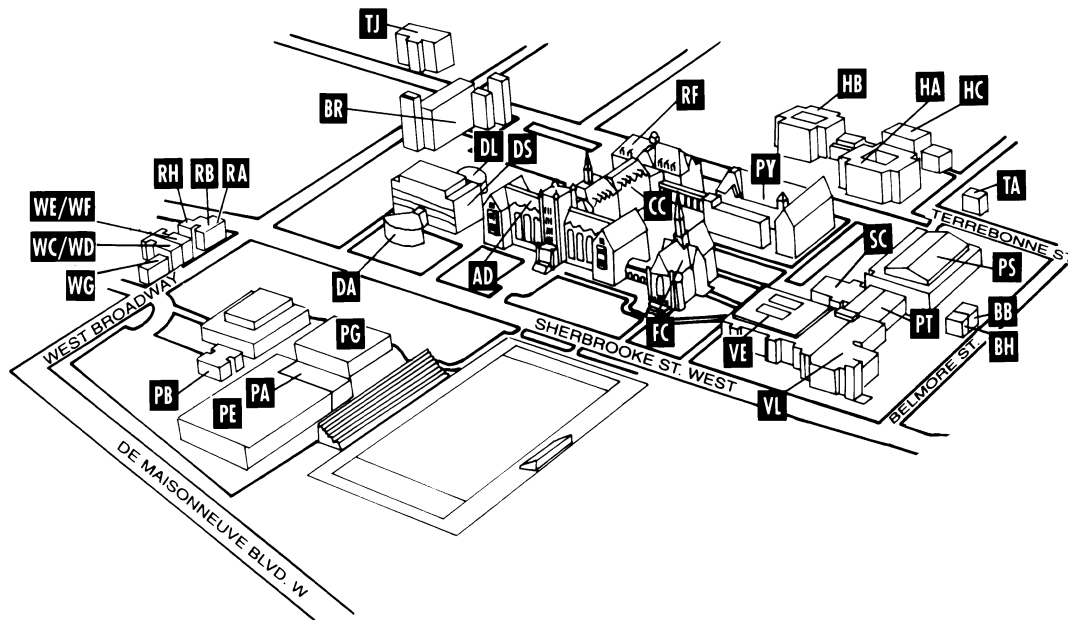
Film

Concordia University houses an impressive collection of films of historic and cultural value.

Athletic Facilities

The University offers extensive programs for participation in intramural and intercollegiate sports. Facilities include several full-sized playing fields and a fully-equipped physical education centre on the Loyola Campus. The centre includes a gymnasium and an ice arena, as well as training and sports medicine areas, an activities room and a weight-training room.

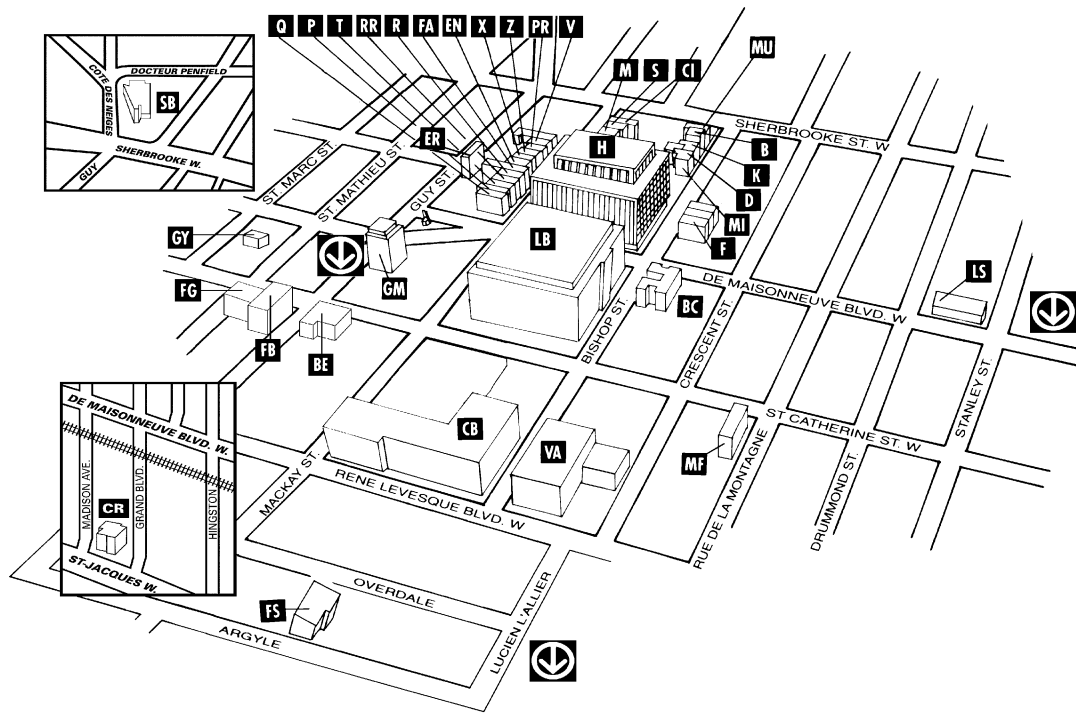
Concordia University Loyola Campus



Loyola Campus — (H4B 1R6)

AD 7141 Sherbrooke W. (Administration Building)	FC 7141 Sherbrooke W. (F.C. Smith Auditorium)	PG 7200 Sherbrooke W. (Athletics Gym)	SC 7141 Sherbrooke W. (Campus Centre)
BB 3502 Belmore Ave	HA 7141 Sherbrooke W. (Hingston Hall - A)	PS 7141 Sherbrooke W. (Physical Services Building)	TA 7079 Terrebonne
BH 3500 Belmore Ave (Belmore House)	HB 7141 Sherbrooke W. (Hingston Hall - B)	PT 7141 Sherbrooke W. (Oscar Peterson Concert Hall)	TJ 7315 Terrebonne
BR 7141 Sherbrooke W. (Bryan Building)	HC 7141 Sherbrooke W. (Hingston Hall - C)	PY 7141 Sherbrooke W. (Psychology Building)	VE 7141 Sherbrooke W. (Vanier Extension)
CC 7141 Sherbrooke W. (Central Building)	PA 7200 Sherbrooke W. (Athletics Complex)	RA 7300 Sherbrooke W.	VL 7141 Sherbrooke W. (Vanier Library)
DA 7141 Sherbrooke W. (Drummond Auditorium)	PB 7200 Sherbrooke W. (Athletics Boiler Room)	RB 7302 Sherbrooke W.	WC 2490 West Broadway
DL 7141 Sherbrooke W. (Russell Breen Senate Chamber)	PE 7200 Sherbrooke W. (Athletics Rink)	RF 7141 Sherbrooke W. (Refectory Building)	WD 2492 West Broadway
DS 7141 Sherbrooke W. (Drummond Science)		RH 7312 Sherbrooke W.	WE 2494 West Broadway
			WF 2496 West Broadway
			WG 2480 West Broadway

Concordia University Sir George Williams Campus



Sir George Williams Campus — (H3G 1M8)

B 2160 Bishop	FS 1438 Overdale	MU 2170 Bishop
BC 1463 Bishop (Bishop Court Administration)	GM 1550 de Maisonneuve Blvd W.	P 2020 Mackay
BE 1257 Guy	GY 1822 de Maisonneuve Blvd W. (Victoria School Gym)	PR 2100 Mackay
CB 1425 René-Lévesque Blvd W.	H 1455 de Maisonneuve Blvd W. (Hall Building)	Q 2010 Mackay
CI 2149 Mackay	K 2150 Bishop	R 2050 Mackay
CR 6277 St. Jacques W. (CONCAVE Research Centre)	LB 1400 de Maisonneuve Blvd W. (J.W. McConnell/Webster Library)	RR 2040 Mackay
D 2140 Bishop	LS 2015 Drummond (Classrooms)	S 2145 Mackay
EN 2070 Mackay	M 2135 Mackay	SB 1590 Docteur Penfield
ER 2155 Guy	MF 1230 de la Montagne (Académie Bourget)	T 2030 Mackay
F 2085 Bishop	MI 2130 Bishop	V 2110 Mackay
FA 2060 Mackay		VA 1395 René-Lévesque Blvd W. (Visual Arts Building)
FB 1250 Guy (Faubourg Tower)		X 2080 Mackay
FG 1616 Ste. Catherine St. W.		Z 2090 Mackay



gender neutral degree nomenclature

In February 1992, Concordia University adopted a policy on degree nomenclature that seeks to provide students with the opportunity to graduate with gender neutral degree titles. This policy stipulates that students are entitled to receive their degrees in either the traditional or new degree nomenclature. The new names for degrees are: Baccalaureate, Magisteriate, and Doctorate. The traditional nomenclature is: Bachelor, Master, and Doctor.

The decision to implement new titles arose from the belief that some of the structures that presently exist at Concordia and other universities reflect a period when women were not accepted as full participants in the academic community. The University felt it was time to offer degree titles that do not refer explicitly or implicitly only to men.

As of June 1994, students may choose to graduate with degree titles that are gender neutral and refer to the diplomas themselves. Graduates who have previously been awarded a Concordia degree will be able to request that their degree be re-issued in the new nomenclature.

concordia university





academic calendar

section

11

11

ACADEMIC CALENDAR

The Academic Calendar is subject to change. Updated information will be available from the Birks Student Service Centre. For dates pertaining to registration and final examinations please consult the relevant class schedule or the Birks Student Service Centre. For financial deadlines see §15. Concordia University recognizes and respects the religious beliefs, observances and obligations of all faiths. For the information of instructors planning assignment deadlines, class tests, etc., and for persons scheduling meetings, the dates of Holy Days of major religions are available at the Birks Student Service Centre.

Deadlines falling on weekends* or holidays will be extended to the next working day.

**Except for academic withdrawal deadlines.*

Regular Session — 2001-2002

2001

MARCH	Thursday, March 1	Last day for application to undergraduate programs — Full-time Regular Session 2001-02.
	Friday, March 2	University Writing Test.
	Friday, March 9	Last day for academic withdrawal from two-term and winter-term courses.
APRIL	Wednesday, April 4	Last day for instructor-scheduled tests or examinations.
	Wednesday, April 11	Last day of classes — Regular Session 2000-01.
	Friday, April 13	University closed.
	Saturday, April 14	University closed.
	Monday, April 16	University closed.
	Tuesday, April 17	Examinations begin.
MAY	Sunday, May 6	Examinations end.
	Friday, May 11	University Writing Test.
	Tuesday, May 15	Last day to apply for late completion of courses ending in April 2001.
	Tuesday, May 15	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses ending in April 2001.
	Wednesday, May 30	Last day for submission of late-completion work for courses ending in April 2001 (application deadline May 15).
JUNE	Monday, June 11	Tentative dates for Spring Convocations: Faculty of Engineering and Computer Science Faculty of Fine Arts Faculty of Commerce and Administration Faculty of Arts and Science.
	Monday, June 11	
	Tuesday, June 12	
	Wednesday, June 13	
	Friday, June 15	Last day to apply for supplemental examinations for courses taken during the Regular Session 2000-01.
	Friday, June 15	Last day to apply for re-evaluation of courses ending in April 2001.

JULY	Sunday, July 15	Last day to apply for degrees, diplomas and certificates for Fall 2001 graduation.
AUGUST	Thursday, August 23	Replacement and supplemental examinations begin — Regular Session 2000-01.
	Wednesday, August 29	Replacement and supplemental examinations end — Regular Session 2000-01.
	Friday, August 31	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses taken during the Summer Session 2001.
SEPTEMBER	Saturday, September 1	Last day to apply for late completion of courses taken during the Summer Session 2001.
	Monday, September 3	Labour Day — University closed.
	Tuesday, September 4	Classes begin — Day and Evening Regular Session.
	Wednesday, September 12	Last day to add two-term and fall-term courses.
	Saturday, September 15	Last day for submission of late-completion work for Summer Session 2001 courses (application deadline September 1).
	Monday, September 17	Last day to apply for supplemental examinations for courses taken during the Summer Session 2001.
	Tuesday, September 18	Deadline for withdrawal with tuition refund from two-term and fall-term courses.
OCTOBER	Monday, October 1	Last day to apply for re-evaluation of courses taken during the Summer Session 2001.
	Friday, October 5	University Writing Test.
	Saturday, October 6	Replacement and supplemental examinations for Summer Session 2001 courses.
	Monday, October 8	Thanksgiving Day — University closed (see December 4, 2001).
	Wednesday, October 31	Last day for academic withdrawal from fall-term courses.
NOVEMBER	Thursday, November 1	Last day for application to undergraduate programs — Winter Term 2002.
	Monday, November 26	Last day for instructor-scheduled tests or examinations.
	Thursday, November 29	Tentative date for Fall Convocation.
DECEMBER	Monday, December 3	Last day of classes — Fall Term.
	Tuesday, December 4	Make-up day for classes scheduled on Monday, October 8 — Instructors must contact Scheduling Office to book a classroom.
	Wednesday, December 5	Examinations begin.
	Friday, December 21	Examinations end.
<hr/>		
2002		
JANUARY	Monday, January 7	Classes begin — Day and Evening Winter Term.
	Tuesday, January 15	Last day to add winter-term courses.
	Tuesday, January 15	Last day to apply for degrees, diplomas and certificates for Spring 2002 graduation.

	Tuesday, January 15	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses ending in December 2001.
	Friday, January 18	University Writing Test.
	Monday, January 21	Deadline for withdrawal with tuition refund from winter-term courses.
FEBRUARY	Friday, February 1	Last day to apply for supplemental examinations for courses ending in December 2001 (graduating students only).
	Friday, February 1	Last day to apply for re-evaluation of courses ending in December 2001.
	Friday, February 1	Last day to apply for late completion of courses ending in December 2001.
	Friday, February 15	Last day for submission of late-completion work for courses ending in December 2001 (application deadline February 1).
	Monday, February 18	Mid-term break begins.
	Monday, February 18	Replacement examinations begin.
	Monday, February 18	Supplemental examinations begin for courses ending in December 2001 (graduating students only).
	Thursday, February 21	Replacement and supplemental examinations end.
	Friday, February 22	Rector's Holiday — University closed.
	Saturday, February 23	Mid-term break ends.
MARCH	Friday, March 1	Last day for application to undergraduate programs — Full-time Regular Session 2002-03.
	Friday, March 1	University Writing Test.
	Monday, March 11	Last day for academic withdrawal from two-term and winter-term courses.
	Friday, March 29	University closed (see April 16, 2002).
	Saturday, March 30	University closed (see April 16, 2002).
APRIL	Monday, April 1	University closed.
	Monday, April 8	Last day for instructor-scheduled tests or examinations.
	Monday, April 15	Last day of classes — Regular Session 2001-02.
	Tuesday, April 16	Make-up day for classes scheduled on March 29 and 30 — Instructors must contact Scheduling Office to book a classroom.
	Thursday, April 18	Examinations begin.
MAY	Sunday, May 5	Examinations end.
	Friday, May 10	University Writing Test.
	Wednesday, May 15	Last day to apply for late completion of courses ending in April 2002.
	Wednesday, May 15	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses ending in April 2002.
	Thursday, May 30	Last day for submission of late-completion work for courses ending in April 2002 (application deadline May 15).

JUNE	Saturday, June 15	Last day to apply for supplemental examinations for courses taken during the Regular Session 2001-02.
	Saturday, June 15	Last day to apply for re-evaluation of courses ending in April 2002.
	T.B.A.	Spring Convocations.
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Summer Session — 2001 (Day and Evening Classes)		
NOTE: These are the standard term dates but there are some courses offered on different schedules. Please consult the 2001-02 Undergraduate Class Schedule for details.		
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MAY	Monday, May 7	Two-term and first-term Summer Session begins.
	Monday, May 21	Victoria Day — University closed.
JUNE	Wednesday, June 20	Last day of classes — First-term Summer Session.
	Thursday, June 21	Mid-term break for two-term Summer Session begins.
	Thursday, June 21	Examinations begin — Mid-term and first-term finals.
	Monday, June 25	Fête Nationale — University closed.
	Saturday, June 30	Examinations end.
	Saturday, June 30	Mid-term break for two-term Summer Session ends.
JULY	Monday, July 2	Canada Day — University closed.
	Tuesday, July 3	Classes begin — Second-term Summer Session.
AUGUST	Wednesday, August 15	Last day of classes for two-term and second-term Summer Session.
	Thursday, August 16	Examinations begin — Two-term and second-term finals.
	Wednesday, August 22	Examinations end.
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Special Six-Week Summer Session — 2001 (Day Classes Only)		
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JULY	Tuesday, July 3	Session begins.
AUGUST	Monday, August 13	Session ends.
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administration

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ADMINISTRATION

The following information was updated as of October 1, 2000.

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	Michael Di Grappa	Theodore Stathopoulos
	Larry English	Patricia A. Thornton
	M. Nabil Esmail	Jerry Tomberlin
	Sabine Friesinger	Reeta C. Tremblay
	J. Charles Giguère	Catherine Vallejo
	Margaret Gourlay	John Woodrow

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Sup Mei Graub, BA, MA, DEd
DIRECTOR, FINANCIAL AID AND
AWARDS:
Roger Côté, BA, MEd
DIRECTOR, HEALTH SERVICES:
Melanie Drew, BSc, MScA



admission regulations

13.1 ADMISSION TO CONCORDIA UNIVERSITY

13.2 DEFINITIONS

13.3 ADMISSION REQUIREMENTS

- 13.3.1** Applicants from Québec Institutions
- 13.3.2** Applicants from Other Canadian Provinces
- 13.3.3** Transfers from Other Universities
- 13.3.4** Transfers from Other Post-Secondary Institutions
- 13.3.5** Pro-Tanto Credits and Exemptions
- 13.3.6** Applicants from Outside Canada
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13.4 LANGUAGE PROFICIENCY

13.5 APPLYING FOR ADMISSION

- 13.5.1** Application Fee
- 13.5.2** Deadlines
- 13.5.3** International Applicants to the John Molson School of Business

13.6 SPECIAL ADMISSIONS

- 13.6.1** Mature Students
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- 13.7.1** All Applicants
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13.8 SELECTION PROCESS AND NOTIFICATION

- 13.8.1** Conditional Admission
- 13.8.2** Admission Deposit
- 13.8.3** Registration

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ADMISSION REGULATIONS

University Registrar
LYNNE PRENDERGAST

Assistant Registrars
ASSUNTA FARGNOLI
LINDA HEALEY
BRUCE MACKENZIE
PETER REGIMBALD
TERRY TOO

Admissions Counsellors
VIRGINIA BOWKER
CHRISTINE CHAN
WAHEEDA HAMID
CATHERINE HIRST

ILZE KRAULIS
MADELEINE LAJAMBE
MARY LALOTIS
DANIELLE PULLEN
GLEN THOMAS
JOYCELYN WEATHERSPOON-JONES
HEIDI WIEDEMANN

Admissions Interviewers
ELENA MARSILLO
SANDRA ROBINSON

Enrolment Officer
TERESA ZUCCARO

<i>Location</i>	Sir George Williams Campus Birks Student Service Centre J.W. McConnell Building, Room: LB 185 (514) 848-2668	Fax: (514) 848-2621 E-Mail: admreg@alcor.concordia.ca University Web Site: http://www.concordia.ca
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13.1 ADMISSION TO CONCORDIA UNIVERSITY

The University gives fair consideration to all applicants and informs them of its decisions and the basis for such decisions within a reasonable period of time. Concordia has a long tradition of service to adult and part-time students. Basic information on admission requirements and procedures is included in this Calendar. More detailed information can be found in the Admissions Guide and at the Concordia Web Site.

In keeping with general principles accepted by Québec universities, admission to Concordia University is open to qualified applicants in the program of their choice. In programs with limited enrolments, not all qualified applicants can be accepted. In such cases, the University accepts those with the strongest qualifications and demonstrable potential. Qualified applicants not admitted to their preferred program are immediately considered for their second-choice program.

The University maintains a Student Service Centre on the Sir George Williams Campus where application forms as well as information about requirements and procedures are available.

There is a single processing centre to which all applications and supporting documents should be mailed:

Concordia University
Admissions Application Centre
P.O. Box 2900
Montréal, Québec
H3G 2S2

It is also possible to submit an application through the Concordia Web Site: <http://www.concordia.ca>

13.2 DEFINITIONS

The Academic Year

The Academic Year begins with a Summer Session (May to August) followed by a Regular Session (September to April). The Summer Session includes all courses offered between the beginning of May and the end of August. The Regular Session is divided into a Fall Term (September-December) and a Winter Term (January-April), each 15 weeks long. Terms include an examination period, during which any final examination must be held. The Academic Calendar §11 lists precise dates for the beginning and end of classes and examination periods.

Exemption

A student may be exempted from a Concordia course based on previous study or a challenge exam. An exemption from a course has no credit value towards a degree. Exemptions from required

courses may be granted in cases where students have already covered the work at any institution with an appropriate level of performance. Any such courses must be replaced with courses chosen in consultation with their advisers.

Extended Credit Program Students

Students registered in an extended program, normally requiring 30 credits in addition to the regular requirements, designed for students entering from secondary institutions outside Québec. (See relevant Faculty section).

Independent Students

Students not seeking a degree or Certificate.

Mature Students

Undergraduate students who do not meet regular academic admission requirements and have been admitted on the basis of their age, experience, and potential.

Pro-Tanto Credits

Pro-tanto credits are credits for courses taken at another institution (or in another Concordia program) which may be transferred towards a Concordia degree.

Residence Requirement

The minimum number of credits which must be taken at Concordia University to obtain a degree or Certificate awarded by the University.

Undergraduate Students

Students registered in an undergraduate degree or Certificate program, whether on a full-time or part-time basis. See §16.1.2 for a definition of full-time and part-time study.

Visiting Students

Undergraduate students from other universities who have written approval from their home university to take courses at Concordia University, or students currently registered in certain Certificate programs sponsored by external associations (e.g. programs related to the Faculty of Commerce and Administration).

13.3 ADMISSION REQUIREMENTS

13.3.1 *Applicants from* *Québec Institutions*

Québec applicants must have successfully completed a two-year pre-university program in a cégep and qualify for a Diploma of Collegial Studies (DEC) or the equivalent. Applicants who have completed a three-year professional program in a cégep or have obtained a French or International Baccalaureate are also eligible for consideration.

Cégep records of applicants must include the successfully completed prerequisites of the Concordia degree program for which they are applying. These programs and admission requirements "profiles" are listed in:

- The Department of Education booklet "Accueil – Structures d'accueil aux études universitaires de premier cycle",
- The programs and admission requirements listed under each Faculty section,
- The Admissions Guide,
- The Concordia Web Site.

Students admitted to a particular program at the University and who subsequently wish to change to another program may have to complete specific prerequisites in addition to their regular program requirements.

13.3.2 *Applicants from Other* *Canadian Provinces*

Graduates of secondary schools in Canadian provinces and territories other than Québec are considered for admission to the Extended Credit Program (ECP) at Concordia. The ECP requires completion of 30 credits in addition to the regular requirements. The duration of a degree program is normally four years. The BEng degree, the BA, Early Childhood and Elementary Education Program, the BEd, TESL and the BFA, Art Education will generally require five years of full-time study to complete.

To be considered for admission, students must have a minimum overall average of 65% in academic subjects taken in the final year of secondary school, and should have senior high school course credits appropriate to the degree program for which they are applying. Higher averages may be required for admission to certain programs in which the demand for places by qualified applicants exceeds the number of places available.

Students completing the following levels of education may be considered for entry to the Extended Credit Program.

Ontario

Applicants from Ontario must present the Ontario Secondary School Diploma (OSSD) with a minimum overall average of 65% in six appropriate Ontario Academic Courses (OACs).

Students entering programs in either the Faculty of Arts and Science or the Faculty of Fine Arts are awarded six credits each (to a maximum of 30 credits) for OAC courses in the humanities or social sciences (as defined by Concordia University) completed with grades of 70% or over. The policy regarding the awarding of credits is subject to review on an annual basis.

Other Provinces

Applicants from all other provinces and territories must have successfully completed Grade 12.

13.3.3

Transfers from Other Universities

Each transfer application is considered on its merits. The number of transfer credits granted depends on the character, quality, and quantity of the work completed at the accredited institution. In allowing transfer credits, some special conditions apply:

1. Students will not be given credit for courses taken in another university during the same academic term in which they have registered for courses at Concordia University, unless special permission has been obtained in advance from this University. The Office of the Registrar should be contacted for information on the correct procedure.

2. To earn an undergraduate degree, students must take a minimum of 45 credits at Concordia University. These should be the **last** 45 credits. The BEng, the BA (Early Childhood and Elementary Education), the BEd (TESL), and the BFA (Art Education) require 60 credits at Concordia.

3. Students transferring to Concordia after having failed to achieve a satisfactory record at any university must take a minimum of 60 additional credits at Concordia.

4. At least 50% of the degree credits for Honours, Specializations, Majors, or Minors must be taken at Concordia. Individual Faculties determine the precise proportion.

5. Students who already have an undergraduate degree may undertake a second undergraduate degree, subject to the conditions below. (Before registering, such students should consider whether their purpose might be better served by taking a graduate degree, diploma, or certificate program.)

To obtain a second undergraduate degree, students must:

- register in a program with a higher concentration than a Minor, and
- complete at least two-thirds of the credits normally required for the second degree in courses other than those credited to the first degree — for example, a minimum of 60 credits must be completed when the normal requirement is 90 credits, and
- complete at least 36 credits in the new field of concentration.

Further detailed information is available in §16.1.3 and §16.1.7 of this Calendar.

13.3.4

Transfers from Other Post-Secondary Institutions

Each transfer application is considered on its merits. Credits from junior colleges, community colleges, or colleges of applied arts and technology outside Québec will, in general, be given the same recognition towards undergraduate programs as they receive in their respective provinces.

13.3.5

Pro-Tanto Credits and Exemptions

Pro-tanto credits are credits for courses taken at another institution (or in another Concordia program) which may be transferred towards a Concordia degree. The Office of the Registrar, in consultation with the four Faculties, assesses all requests for pro-tanto credits.

An exemption from a course has no credit value towards a degree. Exemptions from required courses may be granted in cases where students have already covered the work at any institution, with an appropriate level of performance. Any such courses must be replaced with courses chosen in consultation with their advisers.

13.3.6

Applicants from Outside Canada

In general, candidates who have completed the level of education required for admission to university in their home country and have achieved good grades are eligible to apply for admission. Further information regarding international admission requirements is available in §19.

13.3.7

Former Concordia Students

Former Concordia students who have been absent from Concordia may be required to submit a new application for admission. Students are advised to contact the Office of the Registrar for information on the correct procedure. Normally,

- Students who, during their absence from Concordia, attended another institution and attempted **at least** 12 credits, must submit a new application and make arrangements to have an official transcript sent to the Office of the Registrar. Advanced standing will be assessed as part of the admissions process. If **fewer than** 12 credits have been attempted or if attendance at another

institution was based exclusively on a letter of prior approval from the Faculty Student Request Committee, a new application would normally not be required. Students may, however, be eligible for transfer credits for the work completed during their absence.

- Students who **officially** withdrew from Concordia University and who wish to return to study must submit a new application. If they have attended another institution during their absence, they must also make arrangements to have an official transcript sent to the Office of the Registrar. Advanced standing will be assessed as part of the admissions process.

The Office of the Registrar, in consultation with the four Faculties, assesses all requests for pro-tanto credits. Further detailed information is available in §13.3.3, §16.1.3 and §16.1.7 of this Calendar.

13.4 LANGUAGE PROFICIENCY

While the language of instruction at Concordia is English, most assignments and examinations may be submitted in French. Students whose first language is neither French nor English must demonstrate language proficiency prior to their admission to Concordia. They will ordinarily be exempt from pre-admission English tests if they meet one of the following criteria:

1. They hold a Québec Diploma of Collegial Studies (or its equivalent from an English-language school system).
2. They have obtained a grade of "C" or better in the GCSE English language examination.
3. They have studied for at least three years in an educational institution where the sole language of instruction is English.

If none of these criteria fits, a student whose first language is other than English must write a required English test (see §16.2.4). Only when the Office of the Registrar has received the test results is the student's application to Concordia considered complete.

In all cases, the Office of the Registrar reserves the right to require a proficiency test if it is deemed necessary.

13.5 APPLYING FOR ADMISSION

Application forms are available from the Office of the Registrar. Students may also submit an application through the Concordia Web Site, <http://www.concordia.ca>. Students should apply for admission as early as possible to allow sufficient time for the evaluation of their applications. This is especially true for applicants from outside Canada. Supporting documents must be submitted at the time of application or as soon afterwards as they become available.

Applicants must state their full academic history on their application for admission or risk cancellation of their acceptance or registration. No transfer credit will be awarded retroactively for former studies not reported in the application.

13.5.1 *Application Fee*

There is a \$50 (Canadian) application fee required with every application, payable to Concordia University by certified cheque, money order, MasterCard, Visa, or debit card (Interac). Applicants from outside Canada may pay this fee by international money order or draft drawn on a Canadian bank in Canadian funds.

This application fee is not refundable under any circumstances, nor can it be used towards tuition. It is not transferable to a session other than that for which the student is applying.

13.5.2 *Deadlines*

September is the normal point of entry to full-time and part-time studies. Entry in January or in the Summer Session is limited to certain programs. Students should refer to the admissions information within the relevant Faculty section, in the Admissions Guide, or on the Concordia Web Site.

Full-Time

March 1 and November 1 are the application deadline dates normally set for the Fall and Winter terms respectively. However, candidates are encouraged to submit their applications well before the start of term to allow sufficient time for evaluation and notification.

Part-Time

The deadlines for applying for Fall and Winter terms are July 1 and November 1 respectively. However, candidates are encouraged to submit their applications well before the start of term to allow sufficient time for evaluation and notification.

Note: Part-time applicants to the Faculty of Fine Arts should apply before March 1.

Further information can be obtained from the Office of the Registrar.

13.5.3
*International
Applicants to
the John Molson
School of Business*

While the normal entry period for International Students from outside Canada is September, the John Molson School of Business also considers them for January admission.
The John Molson School of Business has implemented a rolling international admissions process whereby a student whose application becomes complete too late to be considered for a given session will automatically be considered for the next entry date.
NOTE: Visa arrangements can take up to three months after the acceptance letter has been issued to a student. For this reason, students wishing to be considered for January admission are recommended to submit their applications many months in advance.

13.6 SPECIAL ADMISSIONS

13.6.1
Mature Students

Mature students are undergraduates who have not met the regular academic admission requirements (e.g. completion of a DEC or equivalent), but have been admitted on the basis of age, experience, and potential. Mature students may study full-time or part-time.
Information on Mature Entry is contained in §14.

13.6.2
Visiting Students

Visiting students are undergraduate students from other universities who have written approval from their home university to take courses at Concordia University, or they are students currently registered in certain Certificate programs sponsored by external associations. These students may apply for Visiting student status by contacting the Birks Student Service Centre. The granting of such status in no way guarantees a student a place in a course.
1. Undergraduate students from other Québec universities who wish to take courses at Concordia must present the Inter-University Exchange form duly authorized by the home university. Additional information is available in §16.1.7.
2. Undergraduate students from other universities outside the province of Québec who wish to take courses at Concordia must submit a letter of permission from the registrar of their home university and Canadian citizenship/permanent residency documents or *Québec Certificate of Acceptance* (CAQ) and/or student visa. Visiting students who are Canadians or Permanent Residents may be eligible to pay Québec rates of tuition upon submission of proof of Québec residency in accordance with government criteria (see §13.7).
3. Students who wish to register in Certificate programs sponsored by external associations must submit proof of membership in the association and citizenship documents. Visiting students who are Canadians or Permanent Residents may be eligible to pay Québec rates of tuition upon submission of proof of Québec residency in accordance with government criteria (see §13.7).

13.6.3
Independent Students

Concordia University allows individuals who are not seeking a degree or Certificate to register as Independent students, if they are Canadian Citizens, Permanent Residents (Landed Immigrants) or holders of a diplomatic visa, and if they satisfy admission requirements. Independent students may register for a maximum of 18 credits a year, equally divided between Fall and Winter terms. They register for courses once all undergraduate students have selected their schedules; their Independent status in no way guarantees them a place in a given course.
There are two categories of Independent student:
1. those who meet regular admission requirements.
2. those who meet Mature Entry requirements (see §14.3), and satisfy the University that they have the right background for the course(s) for which they wish to register.
Note: Independent students must satisfy the University that they have completed prerequisite courses where required.
Applicants for Independent status should contact the Office of the Registrar. They will be required to submit evidence of having met University entrance requirements and to submit Canadian citizenship/permanent residency documents (see §13.7). Independent students who are Canadians or Permanent Residents may be eligible to pay Québec rates of tuition upon submission of proof of Québec residency in accordance with government criteria (see §13.7).
Independent students who subsequently wish to enter a degree or Certificate program must make a formal application to the Office of the Registrar. Credits acquired by Independent students may subsequently be applied towards a degree or Certificate program, if appropriate. In the case of the Faculty of Arts and Science, an Independent student may be granted a maximum of 30 credits towards a degree.

13.7 REQUIRED DOCUMENTS

Citizenship or Permanent Residency Documents

Canadian Citizens and Permanent Residents (Landed Immigrants) must present proof of their status in Canada. Students who have not provided such evidence are automatically charged international

tuition fees. To prove Canadian citizenship or Permanent Resident status, applicants must supply the Office of the Registrar with an original or a legally certified photocopy of one of the following documents:

- Canadian birth certificate;
- Canadian baptismal certificate (showing place of birth in Canada);
- Canadian citizenship or Permanent Resident (IMM-1000) papers;
- Current Canadian passport.

The following documents are **not** acceptable:

- Driver's licence;
- Medicare or health insurance card;
- Social Insurance Number card.

Proof of Québec Residency

The University will endeavour to establish Québec Residency status for applicants from Québec cégeps by importing province of residence data electronically from government files based on their "code permanent".

Other Canadian Citizens and Permanent Residents (Landed Immigrants) must present proof of Québec residency. Students who have not provided such evidence are automatically charged non-Québec resident fees.

To prove Québec residency, applicants must supply the Office of the Registrar with an original or legally certified photocopy of one of the following documents:

- An "authentic" birth certificate issued by the Government of Québec (regardless of place of birth), which does not contain the notation "Émis en vertu de l'article 137 du Code Civil";
- A "semi-authentic" birth certificate issued by the Government of Québec (regardless of place of birth) before January 1, 1994, which contains the notation "Émis en vertu de l'article 137 du Code Civil";
- A baptismal certificate issued by a Québec parish before January 1, 1994, regardless of place of birth;
- A current Canadian passport on which the place of birth is clearly listed as being in Québec;
- A *Certificat de sélection du Québec* (CSQ) or an official letter from *le ministère des Communautés culturelles et de l'immigration du Québec* attesting that the student is the holder of a CSQ;
- A loan certificate issued by *l'Aide financière aux études du ministère de l'Éducation du Québec* for the current year.

In addition, the student may fit into one of a number of other approved government categories. The student must submit a signed attestation to the University, on the approved government form, with accompanying documentation that is described on the form.

Among the categories recognized by the Government are:

- A student adopted by a person with residency status in Québec at the time of the adoption;
- A student, one of whose parents resides in Québec;
- A student who has resided in Québec for at least 12 months before becoming a full-time student;
- A student who came to Canada as a Permanent Resident without a *Certificat de sélection du Québec* (CSQ) but has resided in Québec for at least three months without having lived elsewhere in Canada for more than three months and his or her parents, or guarantor, do not live in another province in Canada;
- A student whose spouse qualifies under these criteria as a Québec Resident.

If, upon acceptance to a regular University program, proof of Québec residency has not been established, the Office of the Registrar will mail students a blank government form, *Attestation of Residency in Québec*. Visiting and Independent students will be provided with a form at the time they apply for Visiting or Independent status at the Birks Student Service Centre.

Academic Documents

Applicants must submit all secondary and post-secondary academic records. They must ensure that an **official** transcript is forwarded directly to the Admissions Application Centre by all the institutions which they have attended. (Applications will not be considered until an official transcript from EACH institution has been received. These are required even where the student may have earned no credit.)

With their application, students currently enrolled at an institution must include results from all previous terms together with a list of courses in progress. They must arrange for an **official** transcript with the results of the final semester to be forwarded as soon as possible. All documents must be originals or appropriately certified copies. Uncertified copies are not acceptable; neither are records transmitted by fax. Transcripts in a language other than English or French must be accompanied by a notarized translation. If the transcript does not detail the subjects and the grades, a certified statement of these from an authorized official of the institution should also be included.

The above procedure whereby institutions send official transcripts directly to Concordia University is the normal method for receipt of official transcripts. However, in order to accelerate the review of their file, students may submit official transcripts in **sealed envelopes** along with their application, subject to the following procedures: applicants are to request each previous educational institution to provide them with a copy of their official transcript, sealed in an envelope which bears the name and address of the school, the institutional logo (if applicable), a notice on the envelope stating that it contains official transcripts, and a signature/signature stamp/explanatory label placed across the seal of the envelope. The sealed-envelope transcript method may be used only for transcripts issued by institutions in North America.

13.7.2
Code Permanent

The Québec Ministry of Education requires all registered students to have a “code permanent” (a unique identifying number) which is assigned by the Ministry. Students who already have a code permanent must enter it on their application form. Students who do not have a code permanent at the time they apply to the University are required to supply specific information with their application. Concordia will forward this information to the Ministry which will use it to assign a code. For students who have attended or are currently attending cégep in Québec, Concordia University will automatically obtain the required cégep record electronically from CREPUQ (Conférence des recteurs et des principaux des universités du Québec) by using their code permanent.

13.8 SELECTION PROCESS AND NOTIFICATION

13.8.1
Conditional Admission

Applicants seeking admission to undergraduate programs may be granted conditional acceptance on the basis of available academic records, including interim results for the current year. Final admission is contingent upon a student's successfully completing all the academic admission requirements and meeting all conditions as stated in the letter of conditional acceptance issued by the Office of the Registrar.

13.8.2
Admission Deposit

Applicants who have been granted admission or conditional admission to full-time studies or to certain part-time programs must submit a cheque or money order for \$50 (Canadian) to confirm their intention to enter the University. This non-refundable admission deposit is applied towards tuition fees. Applicants who receive conditional acceptance, but who are ultimately denied admission because they have not completed the minimum academic requirements for entrance, will receive a refund of their admission deposit.

13.8.3
Registration

Complete information regarding registration is sent to all students with the letter of acceptance.



mature entry

14.1 GENERAL INFORMATION

14.2 CENTRE FOR MATURE STUDENTS

14.3 ADMISSION AS A MATURE STUDENT

14.4 PROGRAM REQUIREMENTS

14.4.1 Faculty of Arts and Science

14.4.2 John Molson School of Business

14.4.3 Faculty of Engineering and Computer Science

14.4.4 Faculty of Fine Arts

14.5 PROGRAMS OF STUDY FOR SENIOR STUDENTS

14.5.1 Senior Scholarships

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MATURE ENTRY

Director
T.B.A.

Associate Director
T.B.A.

Mature Student Advisers
BRIGEEEN BADOUR
JILL BARRY
ANNE MARIE FERRARI
NELLY TRAKAS

Senior Students Program Coordinator
SYLVIA DE NIVERVILLE

Fellows
JUDY APPLEBY, *Head, Information Services, Library*
TANNIS ARBUCKLE-MAAG, *Professor, Psychology*
BRYAN BARBIERI, *Associate Professor, Marketing*
PETER BIRD, *Professor, Chemistry and Biochemistry*
MICHAEL BRIAN, *Associate Professor, English*
PAMELA BRIGHT, *Associate Professor, Theological Studies*
MARTHE J. CATRY-VERRON, *Adjunct Professor, Études françaises*
MURRAY CLARKE, *Associate Professor, Philosophy*
M. GRAEME DECARIE, *Associate Professor, History*
RICHARD J. DIUBALDO, *Director, Continuing Education*
ROSEMARY DRAGE HALE, *Associate Dean, Graduate Studies*
JOEL HILLEL, *Professor, Mathematics and Statistics*
LYNN HUGHES, *Associate Professor, Studio Arts*
JAMES E. JANS, *Associate Dean, Graduate Studies*
CORINNE JETTE, *Professor, Engineering and Computer Science*
BLUMA LITNER, *Associate Professor, Applied Human Sciences*
SEAN E. MCEVENUE, *Professor, Theological Studies*
JOHN MILLER, *Assistant Professor, English*
DANIELLE MORIN, *Associate Dean, Commerce and Administration*

DAN OTCHERE, *Associate Professor, Economics*
ENN RAUDSEPP, *Associate Professor, Journalism*
WILLIAM R. SELLERS, *Associate Professor, Exercise Science*
FRANCES SHAVER, *Vice-Dean, Arts and Science*
MARTIN SINGER, *Dean, Arts and Science*
RANDY B. SWEDBURG, *Associate Professor, Applied Human Sciences*
PATRICIA A. THORNTON, *Associate Professor, Geography*
REETA C. TREMBLAY, *Associate Professor, Political Science*

Associate Fellows
LESLIE BECSKEI, *Academic Programs Coordinator, Engineering and Computer Science*
PERRY CALCE, *Assistant to Principal/ Internship Coordinator, School of Community and Public Affairs*
DONALD CHAMBERS, *Enrolment Manager, Arts and Science*
ROGER CÔTÉ, *Director, Financial Aid and Awards*
ASSUNTA FARGNOLI, *Admissions Coordinator, Office of the Registrar*
RIVA HEFT, *Director, Adult Education*
ANN KERBY, *Director, Advocacy and Support Services*
LINDA MACDONALD, *Student Affairs Coordinator, Engineering and Computer Science*
PERLA MUYAL, *Academic Adviser, Fine Arts*
MARY O'MALLEY, *Learning and Study Skills Specialist, Counselling and Development*
PETER REGIMBALD, *Assistant Registrar, Office of the Registrar*
OLIVIA ROVINESCU, *Director, Teaching and Learning Services*
MONIR WAHHAB, *Academic Adviser, Commerce and Administration*
HARRY J. ZARINS, *Director, Recreation and Athletics*

Lifetime Honorary Fellow
MARY A. BRIAN, *Adjunct Professor, Mathematics and Statistics*

Location

To advise and assist both prospective and enrolled students, Concordia maintains a Centre for Mature Students with facilities on both campuses.

J.W. McConnell Building, Room: LB 517
1400 de Maisonneuve Boulevard W.
(514) 848-3890

Administration Building, Room: AD 424
7141 Sherbrooke Street W.
(514) 848-3895

Hours:
During Fall/Winter semesters
Monday to Friday
9:00 AM to 5:00 PM

Hours:
During Fall/Winter semesters
Monday to Friday
8:30 AM to 4:30 PM

Evening hours: by appointment.

14.1 GENERAL INFORMATION

Concordia University has a long history of making education accessible to men and women of all ages and academic backgrounds. Through mature entry, those lacking the regular pre-university requirements can still earn university degrees and certificates. Concordia also offers an audit program which allows people 55 years of age or over to participate in courses on a non-credit basis.

At Concordia, we use the term "mature entrants" to designate students 21 or over who have not completed the normal academic admission requirements. The designation does not apply to adult applicants whose academic background qualifies them for regular admission.

In applying to Concordia, students apply for admission to particular programs within one of the four Faculties of the University. In every respect, mature entrants at Concordia are treated as regular undergraduates and are expected to meet the same standards before graduating.

Normally, mature entrants without any cégep or equivalent must complete at least 18 additional credits of preparatory or complementary courses. These additional credits are intended to help mature entrants to prepare for their subsequent studies. Students with partial cégep or equivalent may be given advanced standing for some of the additional 18 credits.

14.2 CENTRE FOR MATURE STUDENTS

The primary aim of the Centre for Mature Students is to provide services for mature entry students returning to formal studies after an absence of some years.

Advisers on staff are qualified to help guide students with course selections or with problems of an academic or administrative nature. The work of the advisers at the Centre is supported and enhanced by the contributions of the Centre's Fellows.

The Fellows are Concordia University faculty members especially interested in the challenges encountered by adults working towards a degree. They are available at certain times to offer advice and information on both elective and required courses in their areas of specialty. Associate Fellows of the Centre, who are generally University staff members, are available to students and advisers for consultation on a variety of concerns such as entry requirements, administrative procedures, and study skills.

It is the goal of everyone involved in the work of the Centre to try to provide mature students with a sense of belonging and help them gain the self-confidence necessary for successful university work.

14.3 ADMISSION AS A MATURE STUDENT

The admission of applicants for mature entry is subject to the following conditions:

1. Applicants must have reached the age of 21 by August 1 for the September term, December 1 for the January term, or April 1 for the May term in any given year;
2. Although not meeting the normal academic requirements for admission (Québec Diplôme d'études collégiales or the equivalent), applicants must satisfy the University that they have the potential to undertake undergraduate courses; those who have the Québec Diplôme d'études collégiales or the equivalent should contact the Office of the Registrar regarding their admission;
3. Applicants must have been out of school — that is not engaged in full-time study — for at least 24 months since attaining the age of 18. Applicants who have been out of school for only 12 months are also admissible provided that they have had no unfavourable academic record in the previous 24 months;
4. Applicants must be Canadian Citizens or Permanent Residents (Landed Immigrants). Applicants must submit proof of citizenship and age, together with school records and any material which may indicate ability to pursue university studies. Applicants are expected to arrange for official transcripts of all of their previous studies to be sent directly to Concordia; (§13 provides general information on how to apply for admission.)

5. In all programs, some students may require courses in English as a Second Language, as determined by Language Proficiency Testing. See §13.4 of this Calendar regarding Language Proficiency Testing.

14.4 PROGRAM REQUIREMENTS

In selecting courses to fulfil the 18-credit requirement, mature students in the Faculty of Arts and Science must consult with advisers at the Centre for Mature Students. Once students have completed these preliminary courses, they select courses in consultation with advisers in their program rather than at the Centre.

Mature students accepted into the Faculties of Commerce and Administration, Fine Arts, or Engineering and Computer Science consult directly with their Faculty in selecting courses to fulfil both the 18-credit requirement and subsequent requirements.

14.4.1 Faculty of Arts and Science

Arts

NOTE: Mature students wishing to apply to Early Childhood and Elementary Education or BEd (TESL) must complete 18 credits prior to applying for entry.

For most BA programs there are no specific program prerequisites. Therefore within the initial 18 credits, students are encouraged to take courses which will broaden their background or help them develop study skills.

The programs listed below have specific prerequisites which will take up some or all of the initial 18 credits.

Community Service (Certificate) AHSC 230³, 232³, 270³; ENGL 212³; 6 credits in the social sciences chosen in consultation with the program adviser.

Economics (BA) MATH 209³

NOTE: Students may need one or more of MATH 200³ and MATH 206³.

Family Life Education (Certificate) AHSC 220³, 230³, 232³; ENGL 212³; 6 credits in the social sciences chosen in consultation with the program adviser.

Human Relations, Specialization (BA) SOCI 212³

Leisure Sciences and Therapeutic Recreation (BA)

PSYC 200⁵; SOCI 212³; BIOL 200^{6*} or 201³

**Students in the Therapeutic Recreation program must choose BIOL 200⁶.*

Mathematics (BA) MATH 203³, 204³, 205³

NOTE: Students not having MATH 202³ or the equivalent must include it in their 18 credits.

NOTE: Students may need one or more of MATH 200³ and MATH 201³.

Psychology (BA) PSYC 200⁶; BIOL 200⁶ or 201³, three credits in Mathematics (in preparation for statistics) chosen in consultation with the Centre for Mature Students.

Science

For those mature entry students pursuing a degree in Science the following courses must be included within their 108-credit requirement:

- 6 credits in Chemistry: CHEM 205³, 206³
- 9 credits in Mathematics: MATH 202³, 203³, 205^{3*}
- 8 credits in Physics: PHYS 204³, 205³, 224¹, 225¹

Additional requirements for programs in the following Departments:

- Biology and Psychology: BIOL 201³
- Chemistry: PHYS 206³, 226¹ and BIOL 201³
- Biochemistry: PHYS 206³, 226¹ and BIOL 201³
- Exercise Science: PHYS 206³, 226¹ and BIOL 201³
- Geology: PHYS 206³, 226¹ and GEOL 210³
- Mathematics: MATH 204³
- Physics: PHYS 206³, 226¹ and MATH 204³

NOTE: Students must consult with advisers of the Centre for Mature Students before registering particularly with regard to the sequencing of the above credits in the BSc degree. Consultation with the Centre for Mature Students is also necessary in the choice of the 18 additional credits required in the case of a Certificate.

** Students not having MATH 201³, or the equivalent, must take it in place of one of their elective courses. Some students may also need MATH 200³.*

14.4.2
John Molson
School of Business

Mature Entry — the 108-credit program

In addition to the 90-credit program, mature entry students will be required to complete the following 18 credits outside the offerings of the John Molson School of Business. Those credits are:

- 6 credits in MATH 208³, 209³
- 6 credits in ECON 201³, 203³
- 3 credits in INTE 290³/COMP 201³
- 3 additional elective* credits.

**These elective credits must be selected from outside the offerings of the John Molson School of Business.*

Requirements for Certificate programs are listed with the program descriptions in §61 of this Calendar.

14.4.3
Faculty of
Engineering and
Computer Science

Engineering

Mature entrants to the BEng degree, which requires completion of a minimum of 116.25 to 120 credits depending on the program chosen, are also required to complete a minimum of 18 credits beyond the normal requirements for their program, including the following courses*:

- a) Building, Civil, Industrial, and Mechanical Engineering:
CHEM 205³
MATH 202³, 203³, 204³, 205³
PHYS 204³, 205³, 224¹, 225¹
COMP 201³
Six credits chosen from courses in the humanities and social sciences.
- b) Electrical and Computer Engineering:
The courses specified in a), plus PHYS 206³

**In all programs, some students may require one or more of MATH 200³ and 201³ as determined by the Faculty, and/or courses in English as a Second Language, as determined by Language Proficiency Testing.*

Computer Science

Mature entry students accepted to the BCompSc must include in their degree program (minimum 108 credits) the following courses*:

- a) Information Systems and Computer Applications Options:
MATH 202³, 203³, 204³, 205³
COMP 201³
- b) Software Systems and Computer Systems Options:
MATH 202³, 203³, 204³, 205³
PHYS 204³, 205³, 224¹, 225¹
CHEM 205³
COMP 201³
- c) Software Engineering Option:
The courses specified in b), plus PHYS 206³

Depending on the option chosen, up to six of the credits listed above may be applied towards the elective component of the regular degree program.

**In all options, some students may require one or more of MATH 200³ and 201³ as determined by the Faculty, and/or courses in English as a Second Language, as determined by Language Proficiency Testing.*

14.4.4
Faculty of Fine Arts

Mature entry students wishing to pursue degree and Certificate programs in the Faculty of Fine Arts must take 18 additional credits appropriate for entry into their ultimate area of concentration. These credits will be chosen with the approval of the Faculty adviser.

14.5 PROGRAMS OF STUDY FOR SENIOR STUDENTS

Concordia University is committed to lifelong learning and community service. Seniors at Concordia either take credit courses in a program or as Independent students. They can also choose to audit courses on a non-credit basis through the Senior Audit Program administered by the Centre for Mature Students.

Students aged 55 and over who wish to attend undergraduate courses primarily in the Faculty of Arts and Science for personal interest rather than for credit, may register to audit courses. Though not required to write class assignments or final examinations, they participate in every other aspect of the courses. Senior audit students pay significantly reduced fees. For more information, call (514) 848-3893.

If seniors wish to pursue an undergraduate program or take courses as Independent students for credit, they may do so at the regular tuition fees. Some assistance through a Senior Student Bursary is possible for those 65 or over. Applications and information may be obtained at the Financial Aid Office or at the Centre for Mature Students.

14.5.1
Senior Scholarships

Five senior scholarships are offered each year by the University. They are worth \$500 a year and may be renewed for up to four years. To be eligible, candidates must be at least 60 years old, and enrolled in a minimum of 12 credits in an undergraduate or graduate program. Educational background and life experience are taken into account in awarding these scholarships. Additionally, the William Schiff Scholarship of \$500 is awarded annually (non-renewable) to a full- or part-time senior student aged 55 or over who is enrolled in a degree program. This scholarship is made possible by the generosity of the senior students at Concordia University. Information on these scholarships may be obtained at the Financial Aid Office.



tuition and fees

15.1 *TUITION AND FEES*

15.2 *PAYMENT OF TUITION AND FEES*

15.3 *CANCELLATIONS - WITHDRAWALS - ADJUSTMENTS*

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15

TUITION AND FEES

15.1 TUITION AND FEES

The Calendar is an official University document defining academic programs and the regulations which pertain to them. It is accurate as of its printing date. The University Senate reserves the right to modify the academic programs and regulations at its discretion after the publication date of the Calendar. In addition, the University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of an academic term. The most current information is available from the Office of the Registrar and, for graduate programs, the School of Graduate Studies. Moreover, the information contained in the Calendar or any other University document related to academic programs and regulations is subject to verification and correction by the Office of the Registrar and the School of Graduate Studies.

Tuition fees for undergraduate courses taken by regular, qualifying or Independent students, are assessed on a per credit basis as listed below:

Canadian and other students with Permanent Residence (Landed Immigrant) status:

Québec residents [†]	\$ 55.61
Non-Québec residents	\$123.61 [‡]

† Please refer to §13.7 of this Undergraduate Calendar for the Government of Québec rules for determining residency.

‡ This rate includes a \$68 per credit premium which must be collected for the Government of Québec.

NOTE: Non-Québec residents following certain programs in the French Language, French Literature or Québec Studies may be exempt from paying this premium. Please refer to §19.3, article 8, for a list of programs for which an exemption may be granted. These are the same programs from which International students may be exempted from paying the International student premium.

*International students:

John Molson School of Business (BComm, BAdmin, Visiting students)	\$333.33
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For all other Faculties, qualifying and Independent students, the total tuition fee assessed per credit includes a premium which must be collected for the Government of Québec. This will be assessed on the basis of the government financial sector of the **course** as follows:

Arts (mostly Fine Arts), <i>sciences pures</i> , <i>sciences appliquées</i> (includes Government premium of \$250 per credit)	\$305.61*
Administration, <i>sciences humaines</i> , <i>éducation</i> , <i>lettres</i> (includes Government premium of \$220 per credit)	\$275.61*

*Certain International students may be eligible to pay the same fees as Canadian students. Detailed information may be obtained from the Office of the Registrar. See §19.3 for guidelines concerning this policy.

Code Permanent Penalty	\$250.00
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Effective Fall 2000, all registered Québec university students for whom the University receives funding must have a "code permanent" which is issued by the Québec Ministry of Education. Students who do not have a code permanent must submit a form and supporting documentation to the Office of the Registrar. If the required documents are not submitted within the deadline, students will be charged an additional \$250 per credit of tuition. Further information, including a copy of the form, is available at: <http://registrar.concordia.ca/cqf/codeperm.htm>

In addition to the tuition fee, the following fees are charged on a per credit basis:

Administrative Fee	\$ 9.00
Student Service Fee	\$ 6.90
Recreation & Athletics Fee	\$ 2.22

Student Association and Activity Fee:	
(Commerce and Administration – CASA)	\$ 5.55*
(Engineering and Computer Science – ECA)	\$ 2.00*
(Other Faculties – CSU)	\$ 3.41*

*Fees include:	CASA	ECA	CSU
Association Fee	\$ 2.05	\$ 2.00	\$ 2.00
Career Placement Centre	\$ 2.50		
R.O. Wills Laboratory Fee	\$ 1.00		
The Link			\$ 0.20
The Concordian			\$ 0.07
QPIRG			\$ 0.30
Canadian Federation of Students			\$ 0.42
Student Broadcast Media Fund			\$ 0.15
Women's Centre			\$ 0.27
Total Fee	\$ 5.55	\$ 2.00	\$ 3.41

In addition to the tuition, student service and student association fee, the following fees are charged:

Capital Campaign (up to a maximum of \$30 per term):	
All students (except Engineering and Computer Science)	\$ 2.00 per credit
Engineering and Computer Science students	
Full-time (24 credits or more)	\$ 60.00 per year
Part-time (fewer than 24 credits)	\$ 30.00 per year

On March 19, 1997, the University's Board of Governors ratified a motion presented by student leaders that introduced a mandatory Capital Campaign Fee for all students. While the fee is mandatory, the University and student leaders are aware and sensitive to the possibility that some students may be in difficult financial circumstances and consequently should be exempted from paying the Capital Campaign Fee.

Students in financial need may apply for a Capital Campaign Fee Exemption. *Capital Campaign Fee Exemption Application* forms are available at the Birks Student Service Centre (SGW – LB 185) and the Dean of Students Office (LOY – AD 121). The application form should be submitted along with all required supporting documentation.

Registration Fee				\$ 20.00 per term
Concordia Student Safety Patrol Fee				\$ 1.00 per term
<i>Le Frigo-Vert</i>				\$ 1.70 per term
(except Summer)				
Concordia Student Health and Dental Care Plan				\$153.00 per year
<u>Coverage</u>	<u>Sept. – Aug.</u>	<u>Sept. – Dec.</u>	<u>Jan. – Aug.</u>	
Health & Dental Plan	\$153.00	\$ 51.00	\$102.00	
Health Plan Only	\$ 66.00	\$ 22.00	\$ 44.00	
Dental Plan Only	\$ 87.00	\$ 29.00	\$ 58.00	

Some students may be eligible to opt out of the Student Health and Dental Plan. Students who wish to opt out of the plan (dental and/or health) must present themselves to the Québec Student Health Alliance, Suite 200, 2045 Stanley St., (514) 844-4423 each academic year. Students who are registered in the Fall or Fall/Winter semesters must opt out between the first day of Fall-term classes and the Fall-term DNE deadline (September 4 – 18, 2001).

Students enrolled in Fall and Winter-term courses **may not opt out** after the September deadline or during the Winter-term opt-out period. Students who are registered in the Winter semester only must opt out between the first day of Winter-term classes and the Winter-term DNE deadline (January 3 – 21, 2002).

Student Orientation Fee (new students in first term of enrolment only):

Full-time students	\$ 35
Part-time students	\$ 25
Health Insurance for International Students (See §19.5)	\$475 per year
(\$475 September to August; \$395 January to August; \$250 May – August)	

Surcharge on Private Study Music Courses:

Six-credit course	\$380
Three-credit course	\$190
Co-op (Institute for Co-operative Education) Fee	\$185 per term
(This fee is charged to students participating in a Co-operative Education Work Study Program)	

Residence Rent and Other Fees:

Single Room	\$315.27 per month
Double Room	\$270.75 per month

Other Fees:

Acknowledgement of Payment Receipt	\$ 1
Application Fee	\$ 50
Application for Degree Transfer	\$ 40
Computer Account (Paper Fee)	\$ 3.50 per year
Confirmation Deposit (non-refundable)	\$ 50
Course Descriptions (maximum \$25)	\$ 5 per academic year
Degree:	
Mailing of Degree	\$ 15
Certification of Copy of Degree	\$ 3
Replacement Degree	\$ 50
Duplicate of Receipt	\$ 2
Examination:	
Deferred Examination/Medical Examination Processing Fee	\$ 15
Off-Campus Examination	\$ 10
Special Examination Fee (CELDT)	\$ 20
Supplemental Examination (plus Invigilation Fee when applicable)	\$ 25
Fax Fee (for each 10 pages or less, excluding cover sheet)	\$ 10
Graduation:	
Graduation Fee	\$ 40
Late Application to Graduate	\$ 15
Handling Charge on a Returned Cheque	\$ 15
Late Completion Fee	\$ 15
Letter of Attestation or Attestation Form	\$ 10
Letter of Financial Standing	\$ 6
Locker Rental Fee:	
Summer Term	\$ 8
Fall/Winter Term	\$ 15
Off-Campus Centre Charge	\$ 5 per credit*
Re-evaluation Processing Fee	\$ 15
Registration:	
Authorization to Register Fee (Independent Student)	\$ 15
Late Registration Fee	\$ 25
Student Record (copy of)	\$ 3
Transcript of Academic Record (per address – maximum 3 copies) (includes \$3 for student copy – see Fax Fee if applicable)	\$ 9
Tuition Receipts for Educational Tax Credit (no charge for first set)	\$ 12
Universal Identification Card	\$ 11.50
Replacement of Identification Card	\$ 11.50
University Calendar (no charge for first copy)	\$ 7

*There are surcharges (cost varies by course) for Distance Learning and Off-Campus courses. For further information, please contact the Open and Distance Learning Coordinator at (514) 848-3440. Interest is payable on the outstanding balance of student accounts at the rate of 0.8% per month (10% per annum). This rate may change from time to time in conformity with prevailing interest rates.

15.2 PAYMENT OF TUITION AND OTHER FEES

Concordia University has a “no-cash” policy. The University will not accept cash for the payment of student tuition and other fees. Payments can be made by debit card (Interac), MasterCard, Visa, certified cheque, money order, or personal cheque.

Financial Obligations: In order to register and remain registered in future sessions, a student's account must be in good standing. All monies owing to the University (such as tuition and other fees, Residence rent, delinquent emergency loans, etc.) must be paid when due. Students with overdue or delinquent accounts are not permitted to register or re-register until payment or satisfactory payment arrangements have been made with the Student Accounts Office.

Once a student has registered for a course(s), he/she is responsible for payment of the resulting fees. If a course is dropped within the deadline for official course withdrawal (DNE), a full refund (or financial credit) of tuition and other fees will be granted. If the course(s) is not dropped on or before the DNE deadline, the student will be held financially responsible for all resulting tuition and other

fees. In the event that a student **has not yet made payment and withdraws after the DNE deadline**, the student will be held financially responsible for the payment of the resulting tuition and other fees. No partial refunds will be granted.

Students are required to make payment when fees become due whether or not they have received an invoice or statement of account. Up-to-date account balances and deadline dates are available on CARL ([514] 275-2275) and on Concordia's Web site for Personal Student Information (www.concordia.ca). Consequently, the University **will not** issue a statement of account every month or when a payment becomes due.

The consequence for non-payment by the payment deadline dates noted below is the cancellation of all **future** course registrations.

<u>Deadline</u>	<u>Fees Payable</u>	<u>Courses Cancelled</u>
August 1	Summer-term (/1) courses	Fall-, Fall/Winter-, Winter-term
September 30	Fall-term (/2) courses	Winter-term
September 30	Two-term (/3) courses	Winter-term
January 31	Winter-term (/4) courses	Future Summer-term

Payment is due as follows:

Summer Registration

Summer Term (/1 courses)

1. Payment is due upon registration. Interest will be charged on outstanding balances beginning May 31.
2. **100% of all Summer fees (/1 courses) must be paid* by August 1.** The consequence for non-payment by the payment deadline is the cancellation of all future course registrations beginning with the next Fall Term (all /2, /3 and /4 courses).

Fall/Winter Registration

Fall Term (/2 courses)

100% of all Fall Fees (/2 courses) must be paid* by September 30. Interest will be charged on outstanding balances beginning September 30. The consequence for non-payment by the payment deadline is the cancellation of all future course registrations beginning with the next Winter Term (all /4 courses).

Fall/Winter Term (/3 courses)

1. **50% of all Fall/Winter, two-term fees (/3 courses) must be paid* by September 30.** Interest will be charged on outstanding balances beginning September 30. The consequence for non-payment by the payment deadline is the cancellation of all future course registrations beginning with the next Winter Term (all /4 courses).
2. **The remaining 50% of all Fall/Winter, two-term fees (/3 courses) must be paid* by January 31.** Interest will be charged on remaining fees beginning January 31. The consequence for non-payment by the payment deadline is that no registration in future academic sessions will be permitted until all overdue accounts are paid in full.

Winter Term (/4 courses)

100% of all Winter fees (/4 courses) must be paid* by January 31. Interest will be charged on outstanding balances beginning January 31. The consequence for non-payment by the payment deadline is that no registration in future academic sessions will be permitted until all overdue accounts are paid in full.

* **Paid:** Payments must be received by Concordia University on or before the prescribed deadline date.

Once students have registered for courses, they are responsible for the payment of all resulting fees. Please refer to §15.3 for information concerning Withdrawal Rebates.

Unpaid Accounts: The University shall have no obligation to issue any transcript of record, award any diploma or certificate, retain registrations in future terms (i.e. early-registered courses) or re-register a student in the case of non-payment of tuition fees, library fines, residence fees, University loans or any other monies owing to the University.

N.B. Tuition Deferrals, Payroll Deductions, and special payment agreements do not supersede the Concordia University tuition and other fees payment policy. Students will not be exempted from paying interest charges on outstanding balances. Transcripts, degrees, diplomas, and other official records will not be released and students will not be permitted to register for additional courses or future academic sessions until all outstanding balances are paid in full.

Adjustment to Accounts: All accounts are subject to revision, as well as in the case of courses cancelled by the University. The University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of an academic term.

Returned Cheques: Current and/or future registrations may be cancelled if a cheque is returned for any reason. (Note: All "returned" cheques must be replaced with a certified cheque, money order, MasterCard, Visa, or debit card [Interac] payment.) In any event, a charge of \$15 will be made for each returned cheque.

15.3 CANCELLATIONS – WITHDRAWALS – ADJUSTMENTS

WITHDRAWAL REBATES

Withdrawal from a course, courses or a program: Students who withdraw from courses or from the University must comply with the requirements set out in this section in order to qualify for any rebate of tuition. Students who are granted late academic withdrawal from a course, courses, or a program after the deadline for academic withdrawal has passed, do not qualify for a rebate of tuition. Once students have registered for courses, they are responsible for payment of the resulting fees.

In order to qualify for a rebate or financial credit of tuition, students must withdraw from courses or from the University in compliance with the requirements and withdrawal deadlines set out in the appropriate Undergraduate Class Schedule. **In the event that students have not yet made payment for these fees, students will be held financially responsible if they do not withdraw from a course, courses, or from the University on or before the prescribed withdrawal (DNE) deadline. Complete withdrawal from the University must be done in person at the Birks Student Service Centre, via CARL, or in writing via registered mail.**

Rebate of Tuition

The following rebates are applied to withdrawals effected in a current academic year.

Summer Session

Courses of at least three weeks duration: withdrawal within one week of the start of the term. No refund after that date.

Courses of less than three weeks duration: withdrawal on or before the first day of the term. No refund after that date.

Courses which begin in September (/2 and /3 courses)

Withdrawal on or before the Fall-term DNE deadline date — September 18, 2001: a full refund. No refund after the deadline.

Courses which begin in January (/4 courses)

Withdrawal on or before the Winter-term DNE deadline date — January 21, 2002: a full refund. No refund after the deadline.

N.B. Exact deadlines are also published in the Undergraduate Class Schedule.

Tuition Refund Request Committee

1. The Tuition Refund Request Committee (the Committee) considers requests from full-time or part-time students for exceptions to the rules governing the refund of tuition fees.
2. A refund request shall be made on a *Tuition Refund Request* form available at the Birks Student Service Centre, the Dean of Students Office, and on the Student Accounts' Web site. A request with respect to a Fall-term course must be made no later than the following February 1; with respect to a Fall/Winter or Winter-term course, no later than the following June 15, and with respect to a Summer-term course, no later than the following October 1. These deadlines may be extended by the Committee in particular cases if the student can provide evidence that he or she was unable to have acted within the deadlines.
3. The Committee shall be composed of four members: a Chair appointed by the Provost and Vice-Rector, Research, a representative from the Student Accounts Office, a representative from the Office of the Registrar, and a student representative.
4. The Committee shall render a decision, based on the written record only, normally within thirty (30) working days of receiving the request. The Committee may reject the request, grant a partial refund or a complete refund. No refunds may be granted unless the student has officially withdrawn from the course(s) in question. The decision of the Committee is final.

OFF-CAMPUS COURSES: Same schedule as on-campus courses.



academic information: definitions and regulations

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16

16 ACADEMIC INFORMATION: DEFINITIONS AND REGULATIONS

University Registrar
LYNNE PRENDERGAST

Supervisor - Birks Student Service Centre
LORRAINE TOSCANO

Assistant Registrars
ASSUNTA FARGNOLI
LINDA HEALEY
BRUCE MACKENZIE
PETER REGIMBALD
TERRY TOO

Supervisor - Records Management and Statistics
MARIE-CLAIRE NEWMAN

Supervisor - Registration and Examinations
LINDA HULL

16.1 General Information

The Calendar is an official University document defining academic programs and the regulations which pertain to them. It is accurate as of its printing date. The University Senate reserves the right to modify the academic programs and regulations at its discretion after the publication date of the Calendar. In addition, the University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of the upcoming academic year. The most current information is available from the Office of the Registrar and, for graduate programs, from the School of Graduate Studies. Moreover, the information contained in the Calendar or any other University document related to academic programs and regulations is subject to verification and correction by the Office of the Registrar and the School of Graduate Studies.

The regulations contained in this section apply to all students at the undergraduate level, whether they are enrolled in degree, Certificate, or qualifying programs or registered as Visiting or Independent students, with the following exceptions:

- Degree, Certificate, and qualifying program requirements are determined by those in effect in the year of the student's admission. (See §16.2)
- The regulations concerning Residence Requirements and Academic Performance Requirements are also governed by those in effect in the year of a student's admission.
- Determination of High Academic Achievement is governed by the most recent regulation in effect.

Students who were admitted before the current year should consult the appropriate Calendar and the Office of the Registrar or, for graduate programs, the School of Graduate Studies, for information on these regulations.

Specific written permission must be obtained from the appropriate authority for exemption from any academic regulation.

Students must have a valid I.D. card to access certain services.

16.1.1 *Academic Year*

The Academic Year begins with a Summer Session (May to August) followed by a Regular Session (September to April).

Summer Session:

The Summer Session includes all courses offered between the beginning of May and the end of August.

Regular Session:

The Regular Session is divided into a Fall Term (September-December) and a Winter Term (January-April), each 15 weeks long. Terms include an examination period, during which any final examination must be held. The Academic Calendar §11 lists precise dates for the beginning and end of classes and examination periods.

16.1.2 *Credit System*

In accordance with the recommendations of the Conseil des Universités du Québec, students' academic activity is measured according to the credit system. For the average student, each credit represents a minimum of 45 hours of academic activity, including lectures, tutorials, laboratories, studio or practice periods, examinations, and personal work.

I. FULL- AND PART-TIME STATUS

A student's status is determined by the number of credits for which she or he is registered at the close of the tuition refund period, in the following way:

	Full-Time*	Part-Time
Registration for both Fall and Winter terms	24 Credits or More	Less than 24 Credits
Registration for Fall Term Only	12 Credits or More	Less than 12 Credits
Registration for Winter Term Only	12 Credits or More	Less than 12 Credits
Registration for the Summer Session	12 Credits	Less than 12 Credits

*NOTE: Students receiving Québec loans and bursaries are advised that, according to the rules established by the Government of Québec, they must maintain registration of 12 credits or more **each term**. For further information, see Financial Aid §18.7.1.

II. CREDIT LOADS

Regular Session – Full-Time Status

Full-time students normally take 30 credits in each Regular Session. They may register for a maximum of 15 credits in each of the Fall and Winter terms. Engineering programs may require more than 30 credits. For information on Engineering credit loads, see §71.

Regular Session – Part-Time Status

Part-time students in all Faculties may register for a maximum of nine credits in each of the Fall and Winter terms.

Regular Session – Independent Status

Independent students may normally register for a maximum of nine credits in each of the Fall and Winter terms.

Summer Session

Any student, other than one in the Institute for Co-operative Education (§24) or the Faculty of Engineering and Computer Science (§71), may register for a maximum of 12 credits during the Summer Session.

16.1.3 Residence Requirements

Residence requirements define the number of credits which students working towards a Concordia University degree must take at the University itself.

1. Of the total number of credits required for an undergraduate degree, students must take a minimum of 45 credits, normally the last 45, at Concordia University. The BEng, the BA (Early Childhood and Elementary Education), the BEd (TESL), and the BFA (Art Education) require 60 credits, normally the last 60, at Concordia.
2. At least 50% of the credits for Honours, Specializations, Majors, Minors or other concentrations must be taken at Concordia. The BComm and BAdmin programs also require that at least 50% of the core courses be taken at Concordia.
3. Concordia University students who wish to include courses taken at another university within their residence requirements must obtain permission **in advance**. (See §16.1.7)
4. Students who already have an undergraduate degree may undertake a second undergraduate degree, subject to the conditions below. (Before registering, such students should consider whether their purpose might be better served by taking a graduate degree, diploma, or certificate program.) To obtain a second undergraduate degree, students must:
 - a) register in a program with a higher concentration than a Minor, and
 - b) complete at least two-thirds of the credits normally required for the second degree in courses other than those credited to the first degree — for example, a minimum of 60 credits must be completed when the normal requirement is 90 credits, and
 - c) complete at least 36 credits in the new field of concentration.
5. An exception to 4b) above, is the BEd in TESL, for which students must complete at least half of the 120 credits required for the second degree in courses other than those credited to the first degree.
6. Any student who is accepted at Concordia University after failing or compiling an unsatisfactory record at another university, will generally be required to complete at least 60 credits.

16.1.4 <i>Registration for Courses</i>	<p>Students select courses for each session (Summer and Fall/Winter) prior to the start of classes. All returning students in good standing and newly admitted students will receive registration material by mail; new Independent and Visiting students can obtain registration information at the Birks Student Service Centre.</p> <p>Most students will be able to register for all their courses by touch-tone telephone using CARL, the Concordia Automated Response Line.</p>
16.1.5 <i>Cancellation of Classes</i>	<p>If no class cancellation notice is posted on the classroom door, classes are officially considered cancelled if an instructor is 15 minutes late for a 50-minute class, 20 minutes late for a 75-minute class, or 30 minutes late for longer classes.</p>
16.1.6 <i>Withdrawal</i>	<p>Students who wish to withdraw from a course or courses must notify the Office of the Registrar. This can be done by calling the Concordia Automated Response Line (CARL), in person at the Birks Student Service Centre, or by letter. (For their own protection, students should send such letters by registered mail or by fax.)</p> <p>Students who wish to withdraw from the University completely must withdraw from all their courses and notify the Office of the Registrar in writing.</p> <p>Withdrawal deadlines are listed in the Academic Calendar (§11) and in the appropriate Class Schedules. Rebates of tuition and other fees are only given for a limited time. (See §15)</p> <p>The responsibility for taking all steps necessary to withdraw from courses is entirely the student's. Not attending classes or informing an instructor of an intent to withdraw does not constitute official withdrawal. An evaluation by the instructor of a student's progress is not mandatory prior to the withdrawal deadline. Students who do not properly withdraw before the specified deadlines will receive failing grades.</p>
16.1.7 <i>Studies at Other Universities</i>	<p>With the exceptions listed below, students who wish to take courses at other universities for transfer credit (for example, in the Summer) must obtain permission in advance from their Faculty Student Request Committee.</p> <p>1. Cross-registration within Québec (Inter-University Agreement)</p> <p>Québec universities have agreed to permit students registered at one university (called the home university), to take one or more courses at another university (called the host university) if they have valid reasons for doing so.</p> <p>A student must obtain authorization to cross-register from his or her academic adviser, the appropriate Associate/Vice-Dean or delegate of the student's Faculty, and the Registrar. Authorization forms are available from the Birks Student Service Centre and the Faculty Dean's offices.</p> <p>The host university has the right to refuse to register a student from another university in any of its courses or programs. Students are expected to follow the registration procedures of the host university and are subject to the regulations of the host university, except for tuition and fee policies which are governed by the home university. Fees are paid to the home university.</p> <p>Credit earned at host universities counts towards Concordia residence and degree requirements. The grades achieved at other institutions for courses taken under the Inter-University Agreement will be recorded on Concordia records and transcripts using a conversion table that will be published by the Office of the Registrar each academic year. Copies of the conversion table are available at the Birks Student Service Centre.</p> <p>These grades will be included in the calculation of Grade Point Averages in the same manner as any grade achieved in a course taken at Concordia.</p> <p>2. Student Exchange Programs and Québec Bursary for Student Mobility</p> <p>To enhance relationships between the people and cultures of different countries and to promote international education at Concordia University, the Centre for International Academic Cooperation (CIAC) of Concordia University in collaboration with the Faculties of Arts and Science, Commerce and Administration, Engineering and Computer Science, Fine Arts, and the School of Graduate Studies, administers the International/Student Exchange Program (I/SEP) with bilateral partner universities and other institutions of higher learning around the world. Through these cooperative linkage agreements, students are permitted to study for one term or the academic year at a partner university while remaining a registered student at Concordia University.</p> <p>As a participating member of the network of Québec universities — <i>La Conférence des recteurs et des principaux des universités du Québec</i> (CREPUQ), the CIAC also administers an I/SEP with universities from around the world.</p> <p>Both the bilateral and CREPUQ I/SEPs are available to all full-time Concordia University students who meet the following conditions:</p> <ul style="list-style-type: none"> • they are in good academic standing and have a good to excellent academic record; • they have completed at least one year of full-time study in the program in which they are registered; • they have written permission of their Faculty.

In most cases, students should be fluent in the language of the hosting university. An important aspect for students considering participating in the I/SEP is that tuition and related fees are, in general, payable to Concordia University. All incidental fees such as health insurance, living expenses, and transportation costs to and from the host country are the responsibility of each student.

In addition to the I/SEP, the CIAC also administers a "Study Away Program" which permits Concordia students to study at universities in other Canadian provinces.

Québec Bursary for Student Mobility / Programme de Bourses du MEQ pour de Courts Séjours d'Études Universitaires à l'Extérieure du Québec

The *Programme de Bourses du MEQ pour de Courts Séjours d'Études Universitaires à l'Extérieure du Québec* is a provincially funded program for Québec resident students registered full-time in a Québec university. Beginning in the Fall 2000 (September 2000) Term, all students who are registered full-time in a program leading to an undergraduate degree, graduate degree or graduate diploma may be eligible to complete a portion of their academic program outside of Québec, enabling them to enhance their educational development in their field(s) of study. This short-term study period can be partially financed by the newly established bursary program offered by the Ministère de l'Éducation du Québec (MEQ).

The amounts permitted will vary according to the region and duration of the study period. The amounts for this program are as follows:

- \$1,000 maximum/month for studies undertaken in the United States, Japan, Australia, New Zealand, and Western Europe;
- \$750 maximum/month for all other countries and other provinces in Canada.

For the 2000-01 academic year, the maximum amounts will be allocated for each region.

Eligibility: For the 2001-02 academic year, the following conditions apply for all full-time Québec resident undergraduate students who are currently enrolled at Concordia University and are applying to either the I/SEP or Study Away Program within Canada.

Further information and application forms for the Concordia and CREPUQ I/SEP, the Concordia Study Away Programs or the Québec Bursary for Student Mobility are available from the Centre for International Academic Cooperation – Loyola Campus, Administration Building, Room: AD 207 – (514) 848-4987, fax 848-2888, or E-mail: ciac@vax2.concordia.ca. The deadline for application is

February 16, 2001.

16.1.8
Student Request
Committees

1. Student Request Committees consider applications from full-time or part-time students for exceptions to academic regulations or related matters, such as permission for course overloads, registration or withdrawals after the deadline, course substitutions, exceptions to residence requirements, and permission to take courses at other universities. Students shall submit applications to the Student Request Committee of the Faculty in which they are registered. Independent students shall submit applications to the Independent Student Request Committee.
2. A student request shall be made on a *Student Request* form available:
 - i) for students registered in the Faculty of Commerce and Administration, the Faculty of Engineering and Computer Science, or the Faculty of Fine Arts — from the relevant Student Affairs Office;
 - ii) for students registered in the Faculty of Arts and Science — from the academic department housing the program in which they are registered;
 - iii) for Independent students — from the Birks Student Service Centre.
3. A student request shall be made within a reasonable period of time from the circumstances giving rise to the request. In determining whether the period of time elapsed is reasonable, all of the circumstances of the case shall be evaluated.
4. Each Faculty shall have a Student Request Committee composed of:
 - three faculty members appointed by the Faculty Council;
 - one representative appointed by the Registrar;
 - one student appointed by the Faculty Council;
 - the Associate/Vice-Dean who shall Chair the Student Request Committee.
 The Independent Student Request Committee shall be composed of:
 - one representative appointed by each Faculty Council for a total of four representatives;
 - one representative appointed by the Director of the Centre for Mature Students;
 - one student appointed by the Concordia Student Union;
 - one representative appointed by the Registrar who shall Chair the Independent Student Request Committee.
5. A Student Request Committee may delegate the responsibility for handling certain kinds of requests to designated individuals (e.g. academic advisers, faculty advisers, student affairs coordinators). Where a decision is made by a delegated individual, the student may appeal that decision to the Student Request Committee, as a whole, based on new evidence or other serious grounds, by sending an appeal request, in writing, to the Chair of the Student Request Committee within ten (10) working days of receiving the decision.

6. In all cases, the delegated individual and/or the Student Request Committee shall render a reasoned written decision, based on the written record only, normally within thirty (30) working days of receiving the request. Decisions of the Student Request Committee are final.

16.1.9
Graduation

Degree and Certificate candidates who expect to complete requirements in a particular year must submit Graduation Application Forms to the Office of the Registrar before July 15 for Fall graduation and before January 15 for Spring graduation. The forms are available at the Birks Student Service Centre. The graduation fee is payable whether or not a student attends Convocation.

16.1.10
Student Record

A record is a comprehensive report of a student's academic history at the University. It is a complete academic record and includes all courses followed at Concordia. It is available to the student and to authorized University staff and faculty. Students may obtain a copy of their record from the Birks Student Service Centre during normal operating hours or by written request. For each copy there is a charge of \$3. Students may also access their record through the Concordia Web Site, www.concordia.ca, at no charge.

16.1.11
Transcript

A transcript is a version of a student's record intended for the use of external institutions, organizations, and employers. It is a complete academic record and includes all courses followed at Concordia. It is accompanied by an explanation of its terminology and is sent directly to the addressee at the written request of the student, providing there is no outstanding account owing to the University. An official transcript is printed on security paper, and is signed and sealed by the Registrar's representative.

16.2 Curriculum Regulations

16.2.1
Modifications to Academic Programs and Regulations

With the exception of the following conditions, the curriculum requirements in effect at the time students are admitted to a program (e.g. BA, BFA, Certificate in Business Studies) and/or concentration (e.g. Major, Specialization), are the requirements which apply to them until they complete their program.

1. The University reserves the right to modify academic program requirements in the light of (a) changing trends in academic and professional fields, and (b) the availability of resources. In the exceptional event that a program is substantially altered by the University Senate, the University recognizes its responsibility to offer suitable transition arrangements for students. The new program requirements should become effective for all students no later than five years after the effective date of change for newly admitted students.
2. When a program is discontinued, the University recognizes its responsibility to offer courses in the program while phasing it out according to a schedule appropriate to the needs of the affected students. Students will be informed of the schedule when the decision is made to phase the program out.
When students in a discontinued program have not been registered for three years, it may not be possible to enable them to complete that program. They may, however, transfer into another program in the University for which they meet the admission requirements.
3. Where students acquire credit towards a degree or Certificate in a discontinuous manner and over a protracted time, the University reserves the right, at any time, to require them to take further credits or fulfil additional requirements to obtain that degree or Certificate.
4. Modifications to the academic regulations in §16.1 and 16.3 become effective for all students on a given date regardless of the student's date of admission to a program, with the following exceptions:
 - 16.1.3 Residence Requirements
 - 16.3.10 Academic Performance Requirements
 - 16.3.11 High Academic Achievement

Modifications to these three regulations apply only to students admitted or readmitted to a program on or after the effective date of such modifications.

5. In the event a student is readmitted after failing an academic year, the University reserves the right to require the student to take additional credits or to repeat certain courses. The student is also subject to changes in academic regulations or program requirements in effect at the time of the student's readmission.

16.2.2
Degree Regulations

The regulations relating to degree requirements are located in the Faculty sections:

Faculty of Arts & Science	Section 31
John Molson School of Business	Section 61
Faculty of Engineering & Computer Science	Section 71
Faculty of Fine Arts	Section 81

Every undergraduate program requires a cohesive sequence of courses. To graduate in a degree program, a student must have completed one of the following concentrations: Honours, Specialization, Major. In the Faculty of Fine Arts, students may follow a Double Minor. In the Faculty of Engineering and Computer Science, concentrations are referred to as Options. Honours is a highly concentrated program with a required performance level; the Specialization and the Major require varying degrees of concentration, normally without a performance requirement; the Double Minor involves a lesser degree of concentration in two disciplines or fields without a performance requirement. An Honours, Specialization, or Major can be combined with a Minor. In some circumstances, a Double Major is also possible.

1. Honours Programs

The University offers programs leading to an Honours degree in certain disciplines. The Honours program consists of 60 or more credits in a discipline, with superior performance required to enter and remain in the program. In their first year, students may register in Honours program courses, but their acceptance as Honours **students** will depend on their performance. Students who do not meet requirements for Honours standing may proceed in either a Specialization or a Major program. These regulations are the minimum academic standards for Honours programs. The programs and particular Faculty regulations are listed in the Faculty sections under "Honours Programs".

1. An Honours student must meet general degree requirements and the specific requirements for an Honours program.
2. An Honours student must maintain a Grade Point Average (GPA) of 3.00 in all Honours courses; the minimum acceptable grade in any Honours course is "C".
3. An Honours student must have a minimum GPA of 2.70 for Honours courses taken each year. For part-time students this is calculated in 18-credit blocks.
4. In non-Honours courses, an Honours student must have a GPA of no less than 2.00.
5. Honours students who do not meet these standards will be withdrawn from the Honours program and will proceed in the Major or Specialization program. Reinstatement in the Honours program is possible only with the permission of the Faculty Honours Committee.

2. Specialization Programs

A Specialization, as recommended by the Conseil des Universités du Québec, is a sequence of courses totalling 60 or more credits. In a few cases it includes a performance requirement. In addition to courses in a particular discipline, the Specialization may include courses in other closely related fields.

3. Major Programs

A Major, as recommended by the Conseil des Universités du Québec, is a sequence of courses totalling 36 or more credits, except in the Faculty of Commerce and Administration where the Major consists of at least 24 credits in a particular discipline in addition to the required 42-credit core. The Major may include certain courses in other closely related fields.

4. Minor Programs

A Minor, as recommended by the Conseil des Universités du Québec, is a sequence of courses totalling 24 or more credits, except in the Faculty of Commerce and Administration where the Minor consists of at least 12 credits in the chosen discipline in addition to the required 42-credit core.

5. Double Minor Programs

In the Faculty of Fine Arts, a Double Minor program is made up of two sequences of courses in different disciplines, each totalling 24 or more credits.

6. Combined Programs

An Honours, Specialization, or Major program may be combined with a Minor program. In some circumstances, a Major program may also be combined with another Major program.

7. Certificate Programs

An undergraduate Certificate is a coherent program, usually of 30 credits, made up of regular undergraduate courses. Courses taken as part of a Certificate program are normally applicable to the appropriate undergraduate degree. There is no guarantee that a Certificate program can be completed in one academic year.

Concordia University is committed to ensuring that its graduating students possess good writing skills. Hence, every student in an undergraduate degree program is required to demonstrate competence in writing English or French prior to graduation. **Students are strongly encouraged to meet the requirement very early in their program to avoid the risk of delayed graduation should remedial work prove necessary.**

Note: Independent students and students enrolled in Certificate programs are not subject to the writing skills requirement.

1. Students, other than those required to take an English proficiency test prior to admission, can meet the requirements in one of two ways:

a) Taking a writing course

Any student can satisfy the writing skills requirement by achieving a grade of "C-" or better in English (ENGL) 212 or Français (FRAN) 400.

All students in the Faculty of Engineering and Computer Science are required to take the University Writing Test. (See §71.20.7)

Students in Journalism programs satisfy the requirement by achieving a grade of "C-" or better in the required course JOUR 201.

b) Taking the University Writing Test (UWT)

The UWT requires a short composition in English or French on the student's choice of several topics. The test is offered a number of times throughout the year and students may take it as often as necessary. (Unsuccessful attempts do not appear on their record.) There is no fee for the UWT.

All newly admitted students, except those required to take JOUR 201 and those already registered for ENGL 212 or FRAN 400, should register for the first available sitting. Dates for the test and registration procedures are listed in §11 and are announced in the campus media and at the Birks Student Service Centre.

Following each sitting of the UWT, students who have taken it will be notified of one of the following:

- a) that they have passed the test and satisfied the writing skills requirement; or
- b) that they should retake the test or register for an appropriate writing course, at their discretion; or
- c) that it is unlikely they will pass the UWT or be admitted to ENGL 212 or FRAN 400 without the remedial work offered in ENGL 205, ENGL 206 or comparable courses in Études françaises.

2. Students required to take an English proficiency test prior to admission

Students who achieve a prescribed level on the Concordia English Language Diagnostic Test (CELDT), the Test of English as a Foreign Language (TOEFL), or the University of Michigan English Language Test, have satisfied the writing skills requirement. Information about the scores required can be obtained from the Office of the Registrar.

Students admitted with the requirement that they take specific courses in English as a Second Language (ESL) satisfy the writing skills requirement by achieving a grade of at least "C-" in ESL 209. Notwithstanding the above exceptions, all students admitted to the Faculty of Engineering and Computer Science must take the the University Writing Test. (See §71.20.7)

16.3 Evaluation, Grading System, Examinations, and Performance Requirements

16.3.1 Evaluation

A university degree certifies that its holder has attained a measurable level of achievement as established by a recognized system of evaluation. Thus the performance of each student in each course must be evaluated by the instructor or instructors responsible for the course.

Final grades are determined by students' performance on one or more of the following:

1. Assigned work, term papers, projects, etc.
2. Class participation which, in certain disciplines, may justify an attendance requirement
3. Progress tests
4. Laboratory tests and/or laboratory work
5. Mid-term and/or final examinations
6. Level of written expression.

The weight accorded to the various elements is at the discretion of the instructor or instructors responsible for the course.

At the beginning of a course the instructor will provide students with the evaluation scheme in writing. The scheme cannot be altered without appropriate notice.

Normally, an instructor will submit final grades no later than seven days after the scheduled final examination in a course or, where there is no final examination, seven days after the last scheduled class in a course. In the case of grades for potential graduates at the end of the Winter Term, instructors are asked to submit grades within three days. There may be additional delays before grades are posted as approvals of the grades and processing time are necessary. Students may obtain their grades by calling CARL — Concordia Automated Response Line at (514) 275-2275, by accessing the Touch Screens on campus, or through the Concordia Web Site at www.concordia.ca. Final grades are official only when they have been approved by the appropriate Faculty Dean or delegate and posted by the Office of the Registrar. The University reserves the right to make corrections at any time in case of error.

16.3.2
Language of
Instruction and
Examinations

While courses at Concordia University are normally taught in English, if students prefer, they may write assignments and examinations in either English or French. However, language and literature courses may require assignments and examinations to be written in the language being studied. Students who wish to write in French should ask at the beginning of a course whether their instructor can read French or whether someone else will evaluate their work. If the work must be read by another person, extra time may be needed.

16.3.3
Grading System

At the end of each course, the instructor will submit a letter grade for every student registered. Using the grade point equivalents listed below, Grade Point Averages (GPA) are calculated for the evaluation of academic achievement, Honours standing, prizes, and academic standing.

Grade	Grade Points	
A+ } A } A- }	4.30 } 4.00 } 3.70 }	Outstanding
B+ } B } B- }	3.30 } 3.00 } 2.70 }	Very Good
C+ } C } C- }	2.30 } 2.00 } 1.70 }	Satisfactory
D+ } D } D- }	1.30 } 1.00 } 0.70 }	Marginal Pass
F, FNS	0	Poor — Failure
R	0	Very Poor — Failure

Grade Not Reported (NR) 0

Passing courses required to fulfil curriculum requirements is not sufficient to graduate as there is also an academic performance requirement (Grade Point Average) in most degree and certificate programs. See the pertinent section of each Faculty's entry in the Calendar for complete details:

Faculty of Arts and Science	Section 31
Faculty of Commerce and Administration	Section 61
Faculty of Engineering and Computer Science	Section 71
The Faculty of Fine Arts does not have a Grade Point Average requirement for graduation.	

16.3.4
Failing Grades and
Administrative
Notations

Failing Grades "F", "FNS", "R", and "NR" notations

1. "F" indicates failure in a course in which a supplemental examination is available.
2. "FNS" indicates failure in a course in which no supplemental examination is available.
3. In a course graded "R", a student is not permitted to write a supplemental examination, apply for a "MED" or "DEF" notation, or complete work late.
4. Not Reported "NR" indicates that a student appears to have unofficially withdrawn from a course. It is assigned by the Registrar when no material is available to evaluate and the instructor has been unable to submit a grade. "NR" carries a grade point value of zero and counts as a failure.
In a course with an "NR", a student is not permitted to apply for a "MED" or "DEF" notation, write deferred or supplemental examinations, or complete work late.

16.3.5
Administrative
Notations "DISC",
"DNW", "INC",
"MED", "DEF",
"REPT"

1. Discontinued "DISC" indicates that a student has properly withdrawn from a course after the end of the course-change period. The notation appears permanently on academic records and official transcripts. It carries no grade point value and does not count in assessments of academic standing.
2. Did Not Write "DNW" indicates that a student has not written the final examination for a course. The notation is used only in combination with a letter grade (such as "F/DNW", "B/DNW"). A student in good standing may write a supplemental examination (if available) in a course with a "DNW" unless the grade is "R/DNW" or "FNS/DNW".

For information on how to apply for supplemental examinations and the regulations which govern them, see §16.3.7 III.

3. Incomplete "INC" indicates that a student has not completed required course work, such as a term paper, assignment, or laboratory and that the instructor has agreed to accept the work after the due date. The notation is used only in combination with a letter grade (such as "F/INC", "C/INC") and is assigned on the basis that the missing work is weighted as zero. When appropriate, "DNW" and "INC" can be used simultaneously (e.g. "F/INC/DNW"). For information on how to apply to complete courses with an "INC" notation, and the regulations which govern late completion, see §16.3.6.
4. Deferred "DEF" indicates that a student has been unable to write an examination because of short-term illness or circumstances beyond the control of the student, or was obliged to be absent for some other compelling reason (including religious reasons). A "DEF" notation carries no grade point value. For information on how to apply for "DEF" notations and the regulations which govern them, see §16.3.7 I.
5. Medical "MED" indicates that a student has been unable to write an examination or complete other assignments due to a long-term medical situation. A "MED" notation carries no grade point value. For information on how to apply for "MED" notations and the regulations which govern them, see §16.3.7 II.
6. Repeat "REPT" indicates that the credit earned for this course cannot be retained because it is a repetition of a course or of similar course material.

16.3.6
Late Completion of
Courses with "INC"
Notations –
Procedures and
Regulations

1. The deadlines for completion of course assignments are given to students on the first day of class. The "INC" notation is assigned when an instructor has agreed that a student may complete work after the deadline.
2. A student with an "R" grade or "NR" notation in a course may not apply for late completion in that course.
3. Students must apply for late completion of a course. *Applications for Late Completion* are available at the Birks Student Service Centre. For each course there is a charge of \$15. Completed applications must be returned to the Birks Student Service Centre by:
February 1: Fall-term courses
May 15: Winter and Fall/Winter courses
September 1: Summer-session courses
4. The completed work must be submitted by:
February 15: Fall-term courses
May 30: Winter and Fall/Winter courses
September 15: Summer-session courses
5. It is the responsibility of the instructor to submit a final grade within five days of these dates.

16.3.7
Deferred "DEF",
Medical "MED"
Notations and
Supplemental
Examinations –
Procedures and
Regulations

- I. **Deferred "DEF" Notations**
 1. A student who has missed an examination because of short-term illness; circumstances beyond his or her control; or who has been obliged to be absent for some other compelling reason (including religious reasons) can apply to have his or her original grade replaced by a **temporary** "DEF" notation. The original grade assigned must include a "DNW" notation.
 2. A "DEF" notation cannot be assigned in a course with an "R" or "NR" notation.
 3. Application forms for "DEF" notations are available from the Birks Student Service Centre. **A completed application must be submitted to the Birks Student Service Centre, not to the instructor, Department, or Faculty**, by January 15 for Fall courses (/2), May 15 for Fall/Winter courses (/3 and /4) or August 31 for Summer courses (/1). The application must be accompanied by a medical certificate on a physician's original letterhead for medical situations or, if the reasons are not medical, by other appropriate documents indicating that the student was unable to write an examination on the day or days in question.
 4. The application for a "DEF" notation must be accompanied by a \$15 per course processing fee.
 5. The Registration and Examinations Office is entitled to ask the student to provide additional medical information. In such cases the student will be supplied with a form to be completed by his or her physician.
 6. When the Registration and Examinations Office approves the awarding of the "DEF" notation, it will temporarily replace the student's original grade for the course or courses concerned. The student is then entitled to write a deferred examination. For information about deferred examinations, see §16.3.9 II.
 7. When the deferred examination has been completed and evaluated, a new grade will replace the "DEF" notation.
 8. When a student receiving the privilege of writing a deferred examination does not write the examination during the specified period, the privilege will be withdrawn and a final grade in the

course will be recorded by the Office of the Registrar according to the grade achieved by the student before the “DEF” notation was granted.

9. When a student repeatedly submits medical certificates, the University reserves the right to refer him or her to a physician appointed by the University for a recommendation.

II. Medical “MED” Notations

1. A student who has missed an examination due to a long-term medical situation can apply to have his or her original grade replaced by a “MED” notation. The original grade must include the “DNW” notation.
2. A “MED” notation cannot be assigned in a course with an “R” grade or “NR” notation.
3. Application forms for “MED” notations are available from the Birks Student Service Centre. **A completed application should be submitted to the Birks Student Service Centre, not to the instructor, Department, or Faculty**, by January 15 for Fall courses (/2), May 15 for Fall/Winter courses (/3 and /4), or August 31 for Summer courses (/1). The application must be accompanied by a medical certificate on a physician's original letterhead indicating that a long-term medical situation prohibited the student from being able to complete the final examination on the day or days in question.
4. The application for a “MED” notation must be accompanied by a \$15 per course processing fee.
5. The Registration and Examinations Office is entitled to ask the student to provide additional medical information. In such cases the student will be supplied with a form to be completed by his or her physician.
6. When the Registration and Examinations Office approves the acceptance of a medical certificate, the notation “MED” will replace the student's original grade for the course or courses concerned. For information about “MED” replacement examinations, see §16.3.9 II.
7. When the replacement examination or missing work has been completed and evaluated, a new grade will replace the “MED” notation. If the student does not write a replacement examination or complete the missing work, the “MED” notation will appear permanently on his or her record and transcript (e.g. “MED/DNW” or “MED/INC”). “MED” notations carry no grade point value. Courses with “MED” notations are not included in assessments of academic standing.
8. When a student repeatedly submits medical certificates, the University reserves the right to refer him or her to a physician appointed by the University for a recommendation.

III. Supplemental Examinations – Regulations

1. Each Faculty determines for which of its courses a supplemental examination is offered.
2. A student must be in acceptable standing in order to write a supplemental examination.
3. A student is permitted to write only one supplemental examination for a course, whether or not the course is being repeated.
4. A student who has received a passing grade for a course may not write a supplemental examination for that course.
5. A student who has received an “NR” or “R” grade may not write a supplemental examination for that course.
6. Applications to write supplemental examinations are available from the Birks Student Service Centre. **A completed application should be submitted to the Birks Student Service Centre, not to the instructor, Department, or Faculty**, by June 15 for Fall/Winter courses (/2, /3 and /4), September 21 for Summer courses (/1) or February 1 for Graduating students (Fall-term courses [/2] only).
7. The application for a supplemental examination must be accompanied by a \$25 fee for each course. The supplemental fee is refundable only if the student is denied permission to write the supplemental.

16.3.8 Academic Re-evaluation

I. General

1. Concordia University affirms the right of students to request the re-evaluation of course work which includes tests, examinations, essays and other work that has contributed to the grading of a course. It is assumed that initiating a formal re-evaluation (“a re-evaluation request”) is a last recourse, taken when prior and sincere attempts to resolve problems and disagreements informally and directly have failed.
2. Students have the right to see their course work. Students are responsible for the preservation of any material, in its entire and original form, which has been returned to them. A re-evaluation request may be refused if this material is not available.
3. Instructors are responsible for the preservation of course work that has not been returned to students as follows: until December 31 of the next calendar year for Fall-term courses; until April 30 of the next calendar year for Fall/Winter and Winter-term courses; and until August 31 of the next calendar year for Summer-term courses.
4. In cases where grades are received for activities other than written or artistic course work, such as class participation, oral presentations, oral examinations and performance, no re-evaluation is normally possible. However, every attempt shall be made by the instructor concerned and the Chair of the Department to address the concerns raised by the student.

5. The grounds for a re-evaluation request are restricted to claims that i) a miscalculation of the grade occurred; or ii) the evaluation of the work was demonstrably unfair.
6. A grade may be maintained, raised or lowered as a result of a re-evaluation request.

II. Procedure

7. Students who are dissatisfied with the grade received on one or more pieces of course work shall first attempt to meet with the instructor and explain their position. If the student remains dissatisfied or is unable to meet with the instructor, he or she may, upon receiving the final grade for the course, make a re-evaluation request.
8. A re-evaluation request shall be made on an "Academic Re-evaluation Request" form available at the Birks Student Service Centre. The student shall specify the reasons for seeking the re-evaluation and shall indicate what informal attempts towards re-evaluation have been made. A processing fee must accompany the request. (See the Tuition and Fees section of this Calendar for the current fee).
9. A re-evaluation request with respect to a Fall-term course must be made no later than the following February 1; with respect to a Fall/Winter or Winter-term course, no later than the following June 15 and with respect to a Summer-term course, no later than the following October 1. These deadlines may be extended by the Registrar in particular cases if the student can provide evidence that he or she was unable to have acted within the deadlines.
10. The Registrar shall forward the re-evaluation request to the Chair of the appropriate Department.
11. The Chair shall decide whether the re-evaluation request conforms to the criteria outlined in articles 4 and 5 above within ten (10) days of receiving the re-evaluation request.
12. If the Chair decides that the re-evaluation request does not conform to the criteria outlined in articles 4 and 5 above, he or she shall communicate this decision with reasons, in writing, to the student with a copy to the Registrar. Should the student disagree with this decision, he or she has the right to appeal the Chair's decision to the Re-evaluation Appeals Committee as set out in article 24 below.
13. Requests for review or other consideration which do not conform to the grounds for a re-evaluation request may fall under the purview of the Chair, the Dean, the Student Request Committee or other mechanisms.
14. If the Chair decides that the re-evaluation request conforms to the criteria outlined in articles 4 and 5 above, he or she shall appoint a re-evaluator whose name shall be communicated to the student and to the instructor concerned. Normally, the re-evaluator shall not be an instructor in whose course the student is registered at that time.
15. Before the re-evaluation begins, the instructor shall provide the Chair with information regarding the nature and structure of the course as well as the evaluation criteria and methods used. The Chair shall communicate this information to the re-evaluator.
16. The entire piece of work identified by the student shall be re-evaluated. The re-evaluator may request additional input from the student or the instructor.
17. The re-evaluation shall normally be completed within thirty (30) days of the Chair's decision that the re-evaluation shall proceed. If it becomes clear that the thirty (30) day delay cannot be met, the Chair shall immediately communicate this information to the student in order to determine whether any serious difficulties may arise from extending the delay.
In the case where the thirty (30) day delay is extended, every effort shall be made to remedy any academic disadvantage that the student may experience as a consequence of the extension of the delay.
18. Upon completion of the re-evaluation, the re-evaluator shall assign a grade to the work in question and shall forward the re-evaluated material to the Chair along with a reasoned report. The Chair shall communicate the re-evaluation decision, in writing, to the student, the instructor and the Registrar, as well as whether the final grade for the course will be modified as a result of the re-evaluation decision. This communication shall include the re-evaluator's report which shall make mention of the documentation and methodology used by the re-evaluator.
19. In cases where there is a significant discrepancy between the original grade assigned and the grade assigned by the re-evaluator, the Chair may convene a meeting with the instructor and the re-evaluator in order to discuss the issue before communicating the decision to the parties concerned. If disagreement as to the discrepancy remains after the meeting, the re-evaluator's grade shall stand.
20. In cases where the re-evaluation decision reveals a generalized flaw in the original evaluation process, the Chair shall take appropriate steps to ensure that the grades of other students in the course are reviewed and modified if appropriate.
21. A final grade that is modified as a result of the re-evaluation shall be entered onto the student's academic record and transcript. If no appeal is filed, the modified grade shall permanently replace the original grade on the student's academic record and transcript. If an appeal is filed, an interim notation to the effect that the grade is "under appeal" shall accompany the grade until the final disposition of the case.

III. Appeals

22. For the purposes of appeals under these procedures, the Senate Appeals Committee on Academic Misconduct shall function as a Re-evaluation Appeal Committee (RAC).
23. A student or instructor may appeal a re-evaluation decision based on either substantive grounds or on the presence of serious and prejudicial procedural defects. In the case of an appeal from an instructor, "prejudicial" shall be limited to the effect that the alleged procedural defect has on other students in the course or on the academic standards of the University. The appeal must state in clear and precise terms the grounds on which the appeal is based. Such an appeal must be made, in writing, to the Secretary of the RAC within fifteen (15) days of receipt of the re-evaluation decision.
24. A student may appeal a Chair's decision that the re-evaluation request did not conform to the criteria outlined in articles 4 and 5 above. This appeal may be based on either substantive grounds or on the presence of serious and prejudicial procedural defects in the Chair's consideration of the re-evaluation request. The appeal must state in clear and precise terms the grounds on which the appeal is based. Such an appeal must be made, in writing, to the Secretary of the RAC within fifteen (15) days of the student's receipt of the Chair's decision.
25. Upon receipt of an appeal from a student, the Secretary of the RAC shall send a copy to the Registrar, the Chair, the instructor and the re-evaluator, if appropriate, soliciting their input within ten (10) days. Any input received within the ten (10) day period shall be forwarded to all parties, soliciting their comments on the input within a further ten (10) days. All input and comments received within the twenty (20) day period shall form part of the dossier submitted to the RAC.
Upon receipt of an appeal from an instructor, the Secretary of the RAC shall send a copy to the Registrar, the Chair, the student and the re-evaluator, if appropriate, soliciting their input within ten (10) days. Any input received within the ten (10) day period shall be forwarded to all parties, soliciting their comments on the input within a further ten (10) days. All input and comments received within the twenty (20) day period shall form part of the dossier submitted to the RAC.
26. The RAC shall render a decision, based on the written record only, normally within thirty (30) days of the filing of an appeal. The RAC shall meet at least once in person before rendering its reasoned decision.
27. In the case of an appeal of a re-evaluation decision, should the Committee determine that serious and prejudicial procedural defects were present in the re-evaluation process or that there are substantive grounds necessitating a new re-evaluation, it shall instruct the Chair to arrange for a new re-evaluation.
28. Should the RAC decide that an appeal be upheld in the case of an appeal of a Chair's decision that the re-evaluation request did not conform to the criteria outlined in articles 4 and 5 above, it shall instruct the Dean to arrange for a re-evaluation independent of the relevant Chair.
29. The RAC shall communicate its reasoned decision to the student, the instructor, the re-evaluator (if appropriate), the Chair and the Registrar and shall include copies of all documentation considered.
30. The decision of the Committee is final.

IV. Miscellaneous Provisions

31. The word "days" is defined as working days which excludes weekends, holidays and other days during which the University is closed.
In the calculation of any delay set out in these procedures, the months of July and August shall not be taken into account.
32. Any written notice addressed to a student or instructor under these procedures shall be sent by regular mail to the last address provided to the University and shall be deemed to be received five (5) days after sending.
Any written notice sent to a student pursuant to Section III – Appeals shall be sent by express post or by same-day messenger.
33. If the course in question was taught by the Chair, the Dean shall assume all of the duties imposed on the Chair in these procedures. If the course in question does not form part of a department, the re-evaluation request shall be forwarded to the appropriate administrator responsible for the course.
34. The overall responsibility for the implementation and recommended amendments to these procedures shall rest with the Provost and Vice-Rector, Research.

Students must present identification in order to write any examination. Acceptable identification is: Concordia student I.D. card; photo- and signature-bearing Medicare card or driver's license.

I. Final Examinations

1. Academic Calendar §11 lists the official examination periods.
2. Examination schedules are posted outside H 110 (SGW Campus) and CC 214 (LOY Campus) and at touch-screen terminals at AD 211 (LOY Campus), outside H 110 (SGW Campus), and in the J.W. McConnell Library Building Atrium (SGW Campus).

3. Since special arrangements cannot be made in the event of personal time conflicts, students should not make personal commitments for the examination periods until after the final schedule is posted.
4. When the final examination schedule indicates that a student has a "conflict", i.e. must write examinations in three consecutive time blocks (e.g. morning, afternoon and evening or afternoon, evening and morning or two at the same day and time), information is available on the touch-screens at AD 211 (LOY Campus), outside H 110 (SGW Campus) and in the J.W. McConnell Library Building Atrium (SGW Campus). The Registration and Examinations Office will make every effort to reschedule or defer one of the examinations provided they are advised by the deadline.
5. No candidate will be permitted to enter an examination room one hour after the examination period has begun, or to leave during the first hour of the examination.
6. **If during the course of an examination a student becomes ill, the student should report at once to the invigilator, hand in the unfinished paper and request that the examination be cancelled. Before leaving the University, the student must also visit the Temporary Examinations Office location in order that a report of the situation may be filed. If physical and/or emotional ill-health is the cause, the student must then report at once to a physician/ counsellor so that subsequent application for a deferred examination is supported by medical documentation.**
7. If a student completes an examination, even though he/she is ill or faced with other personal problems or situations, the subsequent grade obtained in the course must stand. Petitions on the grounds of illness **will not be considered**.
8. In the Fall and Winter terms, no tests or examinations are permitted in the final week of classes. Any exceptions must be approved in advance by the appropriate Faculty Council.

II. Deferred, Replacement and Supplemental Examinations – Regulations

1. Deferred Examinations

- a) A student who did not write a final examination and has been granted a "DEF" notation is permitted to write a deferred examination.
- b) A deferred examination counts for the same weight in the course evaluation scheme and covers the same course material as the original examination.
- c) A student (**unless registered in an Engineering program**) who does not write a deferred examination for medical or other valid reasons as identified in §16.3.7 may apply to write another deferred examination within the following deadlines:
 January 15: for deferred examinations missed in October or December
 May 15: for deferred examinations missed in February or April
 August 31: for deferred examinations missed in June or August
- d) A student who does not write either of the two scheduled deferred examinations for the same course for medical or other serious reasons, must repeat the course to obtain credit. (**Students in Engineering programs have only one opportunity to write a deferred examination.**) Such students are not eligible to write a supplemental examination.
- e) When a student does not write a deferred examination without acceptable medical or other valid reasons, no further examination, deferred or supplemental, will be scheduled.
- f) When a deferred examination is not written, the original grade assigned in the course prior to the granting of the "DEF" notation will be re-instated on the student record and transcript.
- g) When a deferred examination has been written and evaluated, the mark is added to the student's marks for other course work. The resulting final grade will replace the "DEF" notation on the student's academic record and transcript.
- h) A student (**unless registered in an Engineering program**) who fails a course after writing a deferred examination, may have one opportunity to write a supplemental examination during the next scheduled supplemental examination period provided the original grade was not "FNS".
- i) A student cannot write a deferred examination in a course with a grade of "R" or "NR".

2. Replacement Examinations

- a) A student who did not write a final examination and has been granted a "MED" notation is permitted to write a replacement examination.
- b) A replacement examination counts for the same weight in the course evaluation scheme and covers the same course material as the original examination.
- c) A student (**unless registered in an Engineering program**) who does not write a replacement examination for medical or other valid reasons may apply to write another replacement examination within the following deadlines:
 January 15: for replacement examinations missed in October or December
 May 15: for replacement examinations missed in February or April
 August 31: for replacement examinations missed in June or August

- d) A student who does not write either of the two scheduled replacement examinations for the same course for medical or other serious reasons, must repeat the course to obtain credit. **(Students in Engineering programs have only one opportunity to write a replacement examination.)** Such students are not eligible to write a supplemental examination.
- e) When a student does not write a replacement examination without acceptable medical or other valid reasons, no further examination, replacement or supplemental, will be scheduled.
- f) When a replacement examination is not written, the "MED" notation (e.g. "MED/DNW") will appear permanently on the student record and transcript.
- g) When a replacement examination has been written and evaluated, the mark is added to the student's marks for other course work. The resulting final grade will replace the "MED" notation on the student's academic record and transcript.
- h) A student **(unless registered in an Engineering program)** who fails a course after writing a replacement examination, may have one opportunity to write a supplemental examination during the next scheduled supplemental examination period provided the original grade was not "FNS".
- i) A student cannot write a replacement examination in a course with a grade of "R" or "NR".

3. Supplemental Examinations

- a) A student who applied for and satisfies all the requirements is permitted to write a supplemental examination.
- b) Whether or not a supplemental examination is written, the original grade for the course ("F", "F/DNW") will remain permanently on the student's academic record and transcript.
- c) The grade for a supplemental examination is counted as a second attempt at the course. The grades from both attempts are included in calculating Grade Point Averages and assessments of academic standing.
- d) A student who fails a supplemental examination is given a grade of "R". A student who does not write a supplemental examination is not assigned a second failing grade for the course.
- e) A student who does not write a supplemental examination for medical, or other serious reasons, may re-apply to write the supplemental examination for that course during the next scheduled supplemental examination period. The deadline dates are as follows:
 January 15: for supplemental examinations missed in October
 May 15: for supplemental examinations missed in February
 August 31: for supplemental examinations missed in August
 A student who does not write either of these supplemental examinations for medical or other serious reasons, must repeat the course to obtain credit.

III. Deferred, Replacement and Supplemental Examination Periods

Deferred, replacement and supplemental examinations are written at various times throughout the year.

1. Deferred/Replacement Examinations

- a) Faculties of Commerce and Administration, Engineering and Computer Science: Deferred examinations for courses offered in these Faculties are written the next time the course is offered. For potential graduates in Engineering and Computer Science, if there is no examination scheduled for the course in question in the semester before graduation, a deferred examination would be made available during the final examination period of that semester.
- b) Faculties of Arts and Science, Fine Arts: Deferred examinations for courses in these Faculties are written during the next regular examination period **provided** the course is given in the next semester **and** that a final examination is scheduled. If there is no examination scheduled for the course in question in the subsequent examination cycle, the deferred examination would be scheduled during the next deferred examination period (February [mid-term break], August, October).

2. Supplemental Examinations

- a) Faculties of Commerce and Administration, Engineering and Computer Science: There are no supplemental examinations available for courses offered in these Faculties.
- b) Faculties of Arts and Science, Fine Arts: Supplemental examinations for Fall/Winter courses (/2, /3, and /4) are normally written in late August. For Summer session courses (/1) supplemental examinations are usually written in October. Graduating students may write supplemental examinations in February for Fall courses (/2) only.

- 3. In some circumstances, a student who will not be in the Montréal area during the deferred, replacement or supplemental examination period can write his/her examination at another Canadian university or college. A student who wishes to write at an external centre must obtain a request form from the Birks Student Service Centre and pay the necessary processing fee of \$10 for mailing and handling. The student is responsible for any fees that may be charged by the external university.

I. Performance Regulations

Students are required to maintain an acceptable standard of scholarship. Each student's academic standing is assessed at the end of every year, either on the basis of an Annual Weighted Grade Point Average (WGPA) as defined below, or for students in the Faculty of Fine Arts, on the basis of the ratio of credits failed to credits passed.

The specific regulations applicable to students registered in each Faculty can be found in the following sections of the Calendar:

<u>Faculty</u>	<u>See Calendar Section</u>	<u>System Used</u>
Faculty of Arts and Science	31.003.1	WGPA
Faculty of Commerce and Administration	61.20.5	WGPA
Faculty of Engineering and Computer Science	71.10.3	WGPA
Faculty of Fine Arts	81.20.4	No. of Failures

These regulations may be modified in the case of students transferring either between Faculties or from another university.

II. Weighted Grade Point Average

a) Annual Grade Point Average

An Annual Weighted Grade Point Average (WGPA) for each student is calculated at the end of each academic year (including the Summer, Fall and Winter terms), provided that the student has attempted a minimum of 12 credits. If the student has attempted fewer than 12 credits, these credits will be included in the assessment for the following academic year.

When a student transfers from one degree or certificate to another degree or certificate, the WGPA is calculated only for courses recorded in the current degree or certificate. Special regulations for graduating students may be specified in each Faculty's regulations.

Grades for supplemental and replacement examinations and for late completion of courses with "INC" or "MED" notations are included in the assessment period in which they are recorded.

In the Faculty of Engineering and Computer Science, prerequisite courses required for admission to a program will not be counted unless they are specifically listed on the student's acceptance letter.

The WGPA is calculated as follows:

First, for each course attempted, the number of credits for the course is multiplied by the grade points obtained for the course, as specified in §16.3.3. Then, the sum of the grade points for all courses is divided by the total credits attempted.

$$\text{WGPA} = \frac{\sum (\text{course credits} \times \text{grade points})}{\sum (\text{credits attempted})}$$

Σ = sum of

Example:

<u>Course</u>	<u>Grade Achieved</u>	<u>Credit Value</u>		<u>Grade Points*</u>	<u>Weighted Grade Points</u>
1	D	3.00	X	1.00	= 3.00
2	C+	3.00	X	2.30	= 6.90
3	B	2.00	X	3.00	= 6.00
4	A-	6.00	X	3.70	= 22.20
5	F	3.00	X	0.00	= 0.00
		Total Credits Attempted			Total Weighted Grade Points
		17.00			38.10

$$\text{WGPA} = \frac{38.10}{17.00} = 2.24$$

* As detailed in §16.3.3

b) Cumulative Grade Point Average

This is the running total of the GPA since a student was admitted to the most recent degree (or certificate) program. It includes the same courses as were included in the calculation of the Annual Weighted Grade Point Average, but it does not include the grade point weighting of courses which were completed in an earlier program, for which "transfer credit" has been awarded in the new program.

c) Final Graduation Grade Point Average

This is a cumulative GPA of all courses applicable to the new degree program being completed to which special rules apply. For example, additional credits in extended programs are not normally included in any calculation, and repeated courses and transferred courses are treated differently than they are in the Annual or Cumulative GPA calculations. In the case of transfer students, all courses taken at Concordia will be included in calculating the Graduation GPA. This GPA is calculated and recorded on the record only when a student graduates.

The Final Graduation GPA is used as the basis to determine eligibility for High Academic Achievement (§16.3.11).

III. Qualifying Programs and Visiting Students

Students registered in Qualifying Programs or as Visiting students are subject to the regulations of the Faculty in which they are registered.

IV. Independent Students

1. Independent students are subject to the same Grade Point Average requirements as students registered in programs offered by the Faculty of Arts and Science. (See §31.003.1)
2. Independent students who are classified as failed may not re-register without permission of the Registrar.

V. Regulations for Failed Students and Students in Conditional Standing

1. Failed students or students in conditional standing are not eligible to write supplemental examinations.
2. Undergraduate students who are classified as failed may not re-register as Independent students.

VI. Recording of Failed and Conditional Standing

Failed standing is noted on the student's academic record and transcript. In the event that a student is subsequently readmitted, previous failed standing will appear only on the record. Conditional standing is noted on records only.

16.3.11 High Academic Achievement

A degree "With Distinction" or "With Great Distinction" will be awarded to students who obtain Graduation Grade Point Averages (GGPA) of at least 3.40 or 4.00 respectively. The Graduation Grade Point Average is calculated over courses taken in the regular program, as determined by guidelines of the Office of the Registrar. Additional credits in extended programs are not normally included in any calculation. In the case of transfer students, all courses taken at Concordia will be included in calculating the Graduation GPA.

16.3.12 Repetition of Courses

1. In general, a student may repeat a failed course only once. However, a student who fails a required course twice may appeal to the appropriate Student Request Committee for permission to take the course a third time or for permission to replace the course with another. Unless permission is granted, the student will not be allowed to continue in the University towards that program and/or degree.
2. A student who has received a passing grade for a course may repeat the course for personal reasons (e.g. to meet an external requirement). The student's record and transcript will include both grades but the second grade with the "REPT" notation will carry no credit value. The original grade for the course will be used for calculating the Graduation GPA and the Cumulative GPA. For students in the Faculty of Engineering and Computer Science who have been required to repeat courses graded "D", both grades are included in the Graduation GPA.
3. A student who fails a required course must repeat the course during the next session for which she or he registers. If a student fails a required course in the Summer Session and a supplemental examination is available, re-registration for the course may be postponed until after the supplemental examination period for summer-session courses.

16.3.13 Code of Conduct (Academic)

I. Preamble Introduction

1. The integrity of University academic life and of the degrees, diplomas and certificates the University confers is dependent upon the honesty and soundness of the instructor-student learning relationship and, in particular, that of the evaluation process. As such, all students are expected to be honest in all of their academic endeavours and relationships with the University.

Jurisdiction

2. For the purposes of this Code, the student need only have been a student at the time of the alleged offence.
3. If, prior to the initiation of any proceedings under this Code, the student has graduated, the proceedings shall continue.

Ambiguity

4. Wherever there is doubt or ambiguity regarding any provision of this Code or the procedure to be followed, that interpretation or procedure which appears to be most equitable and consistent with the general purposes and philosophy of this Code shall be adopted. Except for those terms specifically defined in this Code, the terms used shall have their usual meanings.

II. Definitions

Student

5. Student is defined as:
 - i. any person registered in the University whether for courses or research and whether or not a candidate for a degree, diploma or certificate;
 - ii. persons once registered in the University who are under suspension from the University;
 - iii. persons registered during a preceding academic term.

Days

6. Days is defined as working days which excludes weekends, holidays and other days during which the University is closed.

Dean

7. Dean is defined as:
 - i. the Dean of the Faculty offering the program in which the student is registered; or
 - ii. if the student is not registered in a program, the Dean of the Faculty providing the course concerned or in the event that the offence is not related to a particular course, the Dean of the Faculty providing the most credits on the student's record; or
 - iii. if the student is a graduate student, the Dean of Graduate Studies and Research.The Dean may delegate an Associate or Vice-Dean to fulfil any of his or her obligations under this Code. If the course concerned is taught by the Dean, the Provost and Vice-Rector, Research shall assume all of the duties imposed on the Dean in this Code.

Invigilator

8. Invigilator means an instructor or any other person who is charged with supervising an evaluative exercise.

Examination

9. Examination means any evaluative exercise including tests, quizzes and like assignments as well as site supervised examinations and non-site supervised examinations as outlined in articles 18 and 19 of this Code.

III. Offences

10. Any form of cheating, plagiarism, personation, falsification of a document as well as any other form of dishonest behaviour related to the obtention of academic gain or the avoidance of evaluative exercises committed by a student is an academic offence under this Code.
11. Any attempt at or participation related in any way to an academic offence is also an offence under this Code and shall be dealt with in accordance with the procedures set out in this Code.
12. Without limiting the generality of article 10 above, academic offences include, but are not restricted to, the carrying out or attempting to carry out or participating in:
 - i. personation — assuming the identity of another person or having another person assume one's own identity;
 - ii. plagiarism — the presentation of the work of another person as one's own or without proper acknowledgement;
 - iii. the contribution by one student to another student of work with the knowledge that the latter may submit the work in part or in whole as his or her own;
 - iv. multiple submission — the submission of a piece of work for evaluative purposes when that work has been or is currently being submitted for evaluative purposes in another course at the University or in another teaching institution without the knowledge and permission of the instructor or instructors involved;
 - v. the obtention by theft or any other means of the questions or answers of an examination or of any other University-related resource that one is not authorized to possess;
 - vi. the possession or use during an examination of any non-authorized documents or materials or possessing a device allowing access to or use of any non-authorized documents or materials;
 - vii. the use of another person's examination during an examination;
 - viii. communication with anyone other than an invigilator during an examination or the obtention of any non-authorized assistance during an examination;
 - ix. tearing or mutilating an examination booklet, inserting pages into a booklet or taking a booklet from the examination room;

- x. the falsification of a document, in particular a document transmitted to the University or a document of the University, whether transmitted or not to a third party, whatever the circumstances;
- xi. the falsification of a fact or research data in a work including a reference to a source which has been fabricated. Falsification shall not include those factors intrinsic to the process of academic research such as honest error, conflicting data or differences in interpretation or judgement of data or of experimental design.

IV. Procedures

Provisions Governing Examinations

- 13. It is the duty of an invigilator to take action under the following articles when he or she becomes aware of any suspected academic offence.
- 14. Every examination paper shall expressly list the materials and equipment that a student is permitted to have and use during the examination and shall indicate any special conditions relating to the examination.
- 15. Except if expressly authorized by the invigilator, a student may not speak or otherwise communicate with any person other than an invigilator.

Centrally Supervised Examinations

- 16. Where an examination is supervised by the Office of the Registrar or where another central supervisory function is available to deal with allegations of offences related to examinations, a student who is suspected of an academic offence shall be so informed by the invigilator and shall be required to leave the examination area.
- 17. The student shall be requested, in a written statement, to choose one of the following options:
 - i. to withdraw from the examination with the understanding that if the charge is dismissed, the student shall be permitted to take another examination for the same course at a mutually agreed upon time but no later than one calendar year from the date of the filing of the Incident Report;
 - ii. to continue the examination under controlled conditions in another location in which case the invigilator shall provide a fresh examination booklet and shall allow additional time for the examination to compensate for any time lost. The student shall continue the examination from the point at which he or she was required to leave the examination area.
- 18. Should the student not indicate a choice, he or she shall be considered to have chosen to withdraw from the examination. Until such time as the student has indicated that he or she has chosen to withdraw from the examination or is deemed to have done so, he or she remains under examination conditions.
- 19. The invigilator shall file an Incident Report with the Dean and shall include the student's examination booklet as well as any other evidence related to the suspected academic offence.

Other Examinations

- 20. Where an examination is not supervised by the Office of the Registrar or where another central supervisory function is not available to deal with allegations of offences related to examinations, a student who is suspected of an academic offence shall be so informed by the invigilator and shall be required to leave the examination area immediately. The invigilator shall file an Incident Report and shall include the student's examination booklet as well as any other evidence related to the suspected academic offence.

Non-Examination Related Offences

- 21. An instructor who, in the course of grading a student's work or through any other means, has reasonable grounds to believe that a student in the instructor's course or working under his or her direction has committed a non-examination related offence shall complete a Code of Conduct (Academic) Incident Report ("Incident Report"). The instructor shall forward the Incident Report to the Dean. The instructor may not, on his or her own authority, impose a sanction on the student. Pending the final outcome of any proceedings under this Code, the instructor shall withhold the grade for the course, if applicable.
- 22. Any administrator of the University who to his or her personal knowledge or upon reliable report has reasonable grounds to believe that a student has committed a non-examination related offence shall complete an Incident Report. The administrator shall forward the Incident Report to the Dean. The administrator may not, on his or her own authority, impose a sanction on the student.

Interviews

- 23. Upon receipt of an Incident Report, the Dean shall send a copy to the student, the Registrar and the Secretary of the Academic Hearing Board and shall indicate whether he or she intends to interview the student to inquire into the alleged offence or whether the Incident Report is being transmitted directly to the Academic Hearing Board. The Dean shall, as well, include a copy of this Code.

24. Should the Dean decide to interview the student, the interview shall take place within fifteen (15) days of the Dean's receipt of the Incident Report. Whenever possible, five (5) days notice shall be given to the student before the interview. In convening the interview with the student, the Dean shall inform the student of his or her right to consult any person and to be accompanied or represented by an adviser from Advocacy and Support Services or any other member of the University community.
25. At the outset of the interview, the Dean shall inform the student that he or she is not obliged to answer any of the Dean's questions and that any answers given may become the basis for an immediate disposition of the case under article 26 or cause the Dean to refer the case to the Academic Hearing Board or be the subject of testimony by the Dean at any subsequent proceeding.
26. Within ten (10) days from the conclusion of the interview, the Dean shall write to the student indicating his or her decision to dismiss the charge or to impose one or more of the following sanctions:
 - i. Reprimand the student;
 - ii. Direct that a piece of work be re-submitted;
 - iii. Enter a failing grade for the piece of work in question or for the course, if applicable;
 - iv. Enter a failing grade and ineligibility for a supplemental examination or any other evaluative exercise for the course;
 - v. Impose the obligation to take and pass courses of up to twenty-four (24) credits in addition to the total number of credits required for the student's program as specified by the Dean. If the student is registered as an Independent student, the sanction will be imposed only if he or she applies and is accepted into a program;
 - vi. Impose specified community service at the University of up to ten (10) hours per week for a specified period of time;
 - vii. Refer the case to the Academic Hearing Board.

In the case of a student who has graduated, the only two available sanctions are i) a notation on the student's academic record that he or she has been found guilty of academic misconduct; or ii) a recommendation to Senate for the revocation of the degree obtained.

Where the Dean has decided to dismiss the charge, the Dean shall direct the instructor to submit a grade for the course in question, if applicable.
27. In the case of a sanction imposed by the Dean under article 26, the letter to the student shall inform him or her of the right to obtain a full hearing before the Academic Hearing Board by notifying the Secretary of the Academic Hearing Board within ten (10) days of the student's receipt of the Dean's decision. A copy of the Dean's letter shall be sent to the Secretary of the Academic Hearing Board, the Registrar and the instructor, if appropriate.
28. Where the Dean has decided to dismiss the charge against the student, a copy of the letter dismissing the charge shall be sent to the Secretary of the Academic Hearing Board.
28. Where the Dean has imposed a sanction under article 26 and the student has not elected to obtain a full hearing under article 27, the Secretary of the Academic Hearing Board shall, within a reasonable time, so notify the Dean and the Dean shall file a report with the Registrar containing the following:
 - i. identification of the student concerned;
 - ii. a statement of the facts and findings;
 - iii. a statement of the course of action taken;
 - iv. a statement to the effect that the student concerned was notified in writing of the action taken and of his or her right to a full hearing before the Academic Hearing Board. Such report shall form a part of the student's permanent file maintained by the Registrar.
29. When the student has elected to obtain a full hearing under article 27, the execution of any decision of the Dean shall be suspended pending disposition by an Academic Hearing Panel. In such cases, the imposition of the sanction of a failing grade shall not be taken into account when calculating the student's grade point average.
30. When the Dean has decided not to interview the student and to transmit the Incident Report directly to the Academic Hearing Board such transmission shall take place within fifteen (15) days of receipt of the Incident Report.

Composition of the Academic Hearing Board

31. The members of the Academic Hearing Board shall be appointed by Senate for two-year staggered terms effective June 1 of each year and shall consist of:
 - i. Ten (10) faculty members (two [2] nominated by each Faculty Council and the Council of the School of Graduate Studies);
 - ii. Ten (10) students (seven [7] nominated by the Concordia Student Union and three [3] nominated by the Graduate Students' Association);
 - iii. Senate shall, as well, appoint a Chair and Vice-Chair from the faculty members.
32. A permanent Secretary of the Academic Hearing Board (the Secretary) shall be appointed by the Secretary-General. The Secretary shall be responsible for the administrative functioning of

the Academic Hearing Board and shall maintain the confidential files and the recordings of the Academic Hearing Board.

33. An Academic Hearing Panel (AHP) of five (5) Academic Hearing Board members consisting of the Chair or Vice-Chair, two (2) faculty members and two (2) students shall be selected for a given hearing by the Secretary as required. Every attempt will be made to select at least one (1) faculty member and one (1) student from the student's constituency (i.e. by faculty and undergraduate or graduate).
34. In the event that an AHP cannot be convened from the membership of the Academic Hearing Board, the Provost and Vice-Rector, Research shall designate the membership of the AHP.

Procedures Before an Academic Hearing Panel

35. Once a matter has been referred to the Secretary, he or she shall convene an AHP to hear the matter. Thereafter, the Secretary shall be responsible for all communications with the parties.
36. A hearing shall be convened as soon as possible after the receipt by the Secretary of the notification and normally within fifteen (15) days. Once a hearing date is fixed by the Secretary, the parties shall submit any documentation they wish considered to the Secretary no later than ten (10) days before the scheduled hearing date. Such documentation shall include any supporting documents and a list of the witnesses, if any, that will appear. The Secretary shall transmit the documentation, together with a list of the Panel members selected for the case, to the parties no later than five (5) days before the scheduled hearing date.
37. Either party may object to the participation of a Panel member on the grounds of potential bias. A reasoned objection shall be filed with the Secretary who shall arrange for an alternate Panel member to serve if he or she determines that the objection is well-founded. If the Secretary feels that the objection is frivolous and the matter cannot be resolved, the issue shall be forwarded to the Chair or Vice-Chair of the Academic Hearing Board who shall render a final decision in this regard.

The Hearing

38. The AHP shall establish its own rules of procedure. Minimally, these rules shall provide for opening statements by the parties, evidence and witnesses called by the parties (expert or otherwise), the right of cross-examination, questioning by members of the AHP, representations with respect to desired sanctions and closing statements. Hearings shall be recorded and the cassettes kept as part of the permanent record of the proceedings for a period of not less than five (5) years.
39. The role of the Chair or Vice-Chair shall be to preside over the proceedings, keep order and ensure fairness. The Chair or Vice-Chair shall, as well, preside over the deliberations of the AHP and shall have a vote in the case of a tie only. Decisions shall be by majority vote. The hearing shall be closed unless both parties have consented in writing to the attendance of members of the University community.
40. The instructor in the course in which the offence took place, if applicable, may be present throughout the hearing or may be called as a witness by either of the parties.
41. If the student fails, without reasonable excuse, to attend the hearing, the hearing may proceed in the student's absence or, at the Chair or Vice-Chair's discretion the start of the hearing may be postponed. If the hearing proceeds in the student's absence, all rights contingent on the student's presence, with the exception of the right to have an adviser present to plead for postponement, are forfeited. In such a case, a student's right of appeal is limited to a consideration of the reasonableness of his or her excuse for not appearing. If an Appeals Committee finds that the excuse is reasonable, it shall order a new hearing by a new AHP with the student present. The decision of the new hearing with the student present is appealable as if it were a first hearing.
42. The decision of the AHP shall be signed, dated and reasoned and shall be sent to both parties. The standard of proof to be relied upon by the AHP shall be one of a "balance of probabilities".

Sanctions

43. Within ten (10) days from the conclusion of the hearing, the AHP shall write to the student and the Dean indicating its decision to dismiss the charge against the student or to impose one or more of the following sanctions:
 - i. a written reprimand;
 - ii. a piece of work be re-submitted;
 - iii. specified community service at the University of up to ten (10) hours per week for a specified period of time;
 - iv. a failing grade for the piece of work in question or for the course, if applicable;
 - v. a failing grade and ineligibility for a supplemental examination or any other evaluative exercise for the course;
 - vi. the obligation to take and pass courses of up to twenty-four (24) credits in addition to the total number of credits required for the student's program as specified by the AHP. If the student is registered as an Independent student, the sanction will be imposed only if he or she applies and is accepted into a program;

- vii. suspension for a period not to exceed six (6) academic terms. Suspensions shall entail the withdrawal of all University privileges, including the right to enter and be upon University premises;
- viii. expulsion from the University. Expulsion entails the permanent termination of all University privileges.

In the case of a student who has graduated, the only two available sanctions are i) a notation on the student's academic record that he or she has been found guilty of academic misconduct; or ii) a recommendation to Senate for the revocation of the degree obtained.

- 44. A sanction of suspension or expulsion is subject to confirmation by the Provost and Vice-Rector, Research.
- 45. Any student found to have committed a second academic offence shall be expelled from the University subject to confirmation by the Provost and Vice-Rector, Research.
- 46. The decision of the AHP shall inform the parties of their right to seek an appeal from the Senate Appeals Committee on Academic Misconduct (SACAM) within fifteen (15) days of receipt of the AHP decision. The AHP decision shall be transmitted to the Registrar, the Secretary of the SACAM and the instructor, if applicable.
- 47. Where neither the Dean nor the student has appealed to SACAM within the stipulated delay, the Secretary of the SACAM shall so inform the Registrar including a statement to the effect that the Dean and the student concerned were notified in writing of the action taken and of their right to seek an appeal from the SACAM. Such report shall form a part of the student's permanent file maintained by the Registrar. This notification shall be sent to the Dean and the student, the Secretary of the AHP and the members of the AHP who presided at the hearing of the case.
- 48. The execution of any sanctions by an AHP shall be suspended until the expiry of the delay to file an appeal or until the rendering of the decision by an Appeals Committee if an appeal is heard. In such cases, the imposition of the sanction of a failing grade shall not be taken into account when calculating the student's grade point average.

Appeals

- 49. The members of the SACAM shall be appointed by Senate for two year staggered terms effective June 1 of each year and shall consist of:
 - i. five (5) faculty members (one [1] nominated by each Faculty Council and the Council of the School of Graduate Studies);
 - ii. four (4) student members (two [2] nominated by the Concordia Student Union and two [2] nominated by the Graduate Students' Association);
 - iii. Senate shall, as well, appoint a Chair and Vice-Chair from the faculty members.
- 50. The Secretary of Senate shall act as the Secretary of the SACAM. The Secretary shall be responsible for the administrative functioning of SACAM and shall maintain the confidential files and the recordings of the SACAM.
- 51. An Appeals Committee of three (3) SACAM members consisting of the Chair or Vice-Chair, one (1) faculty member and one (1) student shall be selected for a given hearing by the Secretary of the SACAM as required. Every attempt will be made to select the student member from the student's constituency (undergraduate or graduate).
- 52. In the event that an Appeals Committee cannot be convened from the membership of the SACAM, the Provost and Vice-Rector, Research shall designate the membership of the Appeals Committee.
- 53. Should either the student or the Dean wish to appeal a decision or sanction of an AHP, he or she shall apply in writing to the SACAM for the authorization to lodge an appeal within fifteen (15) days of receipt of the AHP decision. An Appeals Committee shall decide whether an appeal shall be heard having regard to the circumstances of each case based on the written record.
- 54. Such request for authorization to appeal may be based only on the grounds of discovery of new evidence following the rendering of the decision of the AHP or on the presence of serious and prejudicial procedural defects. The request shall state in clear and precise terms the grounds on which the appeal is based. The Appeals Committee shall be provided with the complete file of the AHP and its decision shall be based on the written record only.
- 55. The Appeals Committee shall make a decision as to whether the authorization to appeal is granted within fifteen (15) days of receipt of the request.
- 56. If the authorization to appeal is granted, the appeal shall be heard either by the same Appeals Committee which authorized the appeal or by a new Appeals Committee as determined by the Chair of the SACAM within fifteen (15) days. Notification of such shall be sent to both parties.
- 57. The Appeals Committee has the authority to confirm, reverse or modify the decision being appealed. Further, should the appeal be based on the production of new evidence, the Appeals Committee may order a new hearing of the case by a new AHP.
- 58. The Appeals Committee shall render its decision within ten (10) days of the hearing. Any decision of the Appeals Committee shall be signed, dated and reasoned and shall be sent to both parties, the Secretary of the Academic Hearing Board, the Registrar, the instructor, if applicable and the members of the AHP who presided at the hearing of the case.
- 59. The decision of the Appeals Committee shall be final.

60. In the case of the denial of an appeal where the sanction imposed by the AHP was suspension or expulsion, the suspension or expulsion shall be retroactive to the date of the original decision by the AHP and shall take effect from the date of the Appeals Committee decision.

V. Miscellaneous Provisions

Delays

61. In the calculation of any delay set out in the Code, the months of July and August shall not be taken into account. In the case of a hearing before an AHP or an Appeals Committee that commenced before July 1, the regular delays set out in this Code shall apply.

Notices

62. Any written notice addressed to a student under this Code shall be sent by courier to the last address provided by the student to the University and shall be deemed to be received one (1) day after sending.

Notations on Academic Record and Transcript

63. Sanctions of a failing grade in a course and more serious sanctions shall be reflected on the student's academic record with the additional notation of "for academic and disciplinary reasons".
64. Sanctions of a failing grade in a course, a failing grade in a course and further ineligibility for a supplemental examination and the obligation to take extra courses shall be reflected on the student's academic transcript without any additional notations.
65. Suspensions imposed under this Code shall be recorded on the academic transcript as follows: "Required to withdraw for academic and disciplinary reasons. May not resume studies until [date]". At the date for resumption of studies, the notation shall be removed from the transcript but shall continue to appear on the student's academic record.
66. Any expulsion imposed under this Code shall be recorded on the academic transcript as follows: "Required to withdraw for academic and disciplinary reasons. May not apply for re-admission".
67. In cases where a sanction has been imposed but a student has requested either a full hearing before an AHP or an appeal to SACAM has not been disposed of, the notation on the record shall reflect the sanction but shall note that the sanction is "pending". In the case of a sanction of suspension or expulsion, the notation on the academic transcript shall note that the sanction is "pending".

Records and Confidentiality

68. The Registrar shall maintain a record in the student's official file with respect to all sanctions imposed under this Code.
69. Such record shall be kept in strictest confidence and shall only be communicated to the student concerned and to other persons within the University having a legitimate interest or duty to take communication of them.
70. Nothing contained in this section shall be interpreted as preventing the Registrar or any other University member from responding to a court order requiring the disclosure of information or statements obtained in the course of an interview or hearing conducted under this Code.

Annual Report

71. An annual report detailing the number of charges laid under this Code and their disposition shall be prepared by the Secretary of the Academic Hearing Board and presented to Senate by September 30 of each year. The report shall be published in the University's newspaper. In no circumstances shall any mention be made of the names of the parties involved nor of any information which might lead to their identification.

Training

72. The members of the Academic Hearing Board, of the SACAM and the Deans or their delegates shall receive annual training prepared and conducted jointly by the Secretary of the Academic Hearing Board, the Director of Advocacy and Support Services and the University Legal Counsel.

Overall Responsibility for Code

73. The overall responsibility for the implementation and recommended amendments to this Code shall rest with the Secretary-General. The Secretary-General shall transmit an information sheet to each Dean and Chair at the beginning of each term outlining the general framework of this Code.



17.10 rights and responsibilities

17.20 ombuds office

s e c t i o n

17

17.10

RIGHTS AND RESPONSIBILITIES

Advisor on Rights and Responsibilities
SALLY SPILHAUS

Location Sir George Williams Campus
Office of Rights and Responsibilities
Annex K, Room: 110
(514) 848-4857

CODE OF RIGHTS AND RESPONSIBILITIES

- Scope*
- Code Applies to All Members of the University**
1. This Code applies to all members of the University, that is, faculty members, administrative and support staff, and students. The process for the formal resolution of complaints made against students is distinct from the process for the formal resolution of complaints made against faculty members and administrative and support staff.
- Contractors, Their Employees and Visitors**
2. Contractors, their employees and representatives, and visitors to the University are expected to conduct themselves in any University-related activity in a manner consistent with this policy. Violations of this Code by such persons may be dealt with as potential breaches of contract or may result in suspension of University privileges, such as access to campus. Should such persons believe that they have been subjected to conduct on campus in violation of this Code, they may consult the Office of Rights and Responsibilities for advice.
- Code Does Not Supersede Other Policies or Agreements**
3. Nothing in this Code shall replace or supersede complaint, grievance or appeal procedures set out in any collective agreement to which Concordia University is a party, the Code of Conduct (Academic), the University Calendars or the University Policy Manuals.
- Jurisdiction**
4. Complaints with respect to a violation of this Code may be made by members of the University in relation to the conduct of other members where the complainant is directly affected by the conduct in question. As well, the University, through its designated officers, may make a complaint on its own behalf. The alleged violation must have taken place on University premises, either rented or owned, or on other premises, in the course of any University-sponsored activity or event. Exceptionally, complaints may be made regarding an alleged violation that has taken place at another location, where the potential consequences of the violation may adversely affect the complainant's course of work or study at the University.

- Preamble*
- Rights**
5. All faculty members, administrative and support staff, and students may reasonably expect to pursue their work and studies in a safe and civil environment. Concordia University therefore does not condone discrimination, harassment, sexual harassment, threatening or violent conduct or offenses against property. Such conduct is defined in articles 15 to 19.
- Responsibilities**
6. All faculty members, administrative and support staff, and students are expected to refrain from violating this Code. Members of the University who have supervisory authority over others bear a particular responsibility to act in a timely and effective manner if they become aware of any violation of this Code.
- Assistance From the Office of Rights and Responsibilities**
7. This Code establishes the Office of Rights and Responsibilities, whose mandate is to assist University members in resolving incidents involving an alleged violation of this Code, in an effective and constructive manner. Such assistance is available both to individuals who believe that they have been subjected to conduct that violates this Code, and to those with supervisory authority who are called upon to respond to incidents of such conduct.

Complaints Subject to a Range of Responses

8. In keeping with its desire to settle conflicts in an effective and constructive manner, the University shall endeavour to seek an appropriate response to any alleged violations of this Code, ranging from the use of alternate methods of conflict resolution to formal procedures for adjudicating complaints. If a violation has occurred, every attempt shall be made to use remedies and sanctions that restore harmony, collegiality and cooperation between members.

Informing the Community

9. The Office of Rights and Responsibilities, together with the Advisory Committee on Rights and Responsibilities, shall undertake to inform all members of the University of the provisions of this Code and the services provided by the Advisor.

Fairness and Consistency

10. Complaints made under this Code shall be adjudicated in a manner that is consistent with the principles of natural justice and fair for all parties to the complaint, regardless of constituency. The principles of natural justice may be defined broadly as the obligation to hear the other side and to make a decision untainted by bias.

Academic Freedom

11. This Code is not to be applied in such a way as to detract from the right of faculty members, administrative and support staff, and students to engage in the frank discussion of potentially controversial matters, such as race, sex, sexual orientation, politics or religion. Further, the Code should not be interpreted in such a way as to limit the use of legitimate instructional techniques, such as irony, argument, conjecture and refutation, or the assignment of readings which may present a controversial point of view. This Code also recognizes the right to teach according to one's best judgement, within the bounds of the course calendar description and requirements of competency.

Management Rights

12. This Code is not to be applied in such a way as to detract from the right and duty of those with supervisory authority to manage, and if necessary to discipline, faculty, administrative and support staff, and students in accordance with collective agreements and University policies and procedures.

Union Rights

13. This Code is not to be applied in such a way as to detract from the rights of unions to defend the interests of their members and to exercise their rights under a collective agreement.

Recourse at Law

14. This Code does not detract from the right of members to seek recourse at law.

Definitions

Discrimination

15. Discrimination is defined as treatment which:
- a) has the effect or purpose of imposing burdens, obligations or disadvantages on members or groups of members; *and*
 - b) for which there is no bona fide and reasonable justification; *and*
 - c) when such treatment is based on one of the prohibited grounds specified in the Québec Charter of Human Rights and Freedoms, that is: race, colour, ethnic or national origin, sex, pregnancy, sexual orientation, civil status, age, religion, political convictions, language, social condition, handicap or the use of a means to palliate a handicap.

Harassment

16. Harassment is defined as:
- a) unwelcome, vexatious conduct, directed towards a member or group of members; *and*
 - b) which may or may not be based upon one of the prohibited grounds specified in article 15 c); *and*
 - c) when such conduct has the effect or purpose of unreasonably interfering with a member's work or academic, athletic or artistic performance or of creating an intimidating or hostile environment for work or study.

Sexual Harassment

17. Sexual harassment is defined as conduct of a sexual nature such as, but not limited to, sexual assault, verbal abuse or threats of a sexual nature, unwelcome sexual invitations or requests, demands for sexual favours or unwelcome and repeated innuendos or taunting about a member's body or appearance when:

- a) submission to such conduct is made, whether explicitly or implicitly, a term or condition of a member's employment or educational progress; *or*
- b) submission to or rejection of such conduct is used as the basis for an employment or academic decision affecting that member; *or*
- c) when such conduct has the effect or purpose of unreasonably interfering with a member's work or academic, athletic or artistic performance or of creating an intimidating or hostile environment for work or study.

Threatening or Violent Conduct

18. Threatening or violent conduct is defined as:

- a) assaulting another member; *or*
- b) threatening another member or group of members with bodily harm or causing another member or group of members to have reasonable grounds to fear bodily harm; *or*
- c) creating, or threatening to create, a condition which unnecessarily endangers or threatens the health, safety or well-being of another member or group of members or threatens the damage or destruction of property.

Offenses Against Property

19. Offenses against property are defined as wilfully or recklessly taking, having unauthorized possession of, damaging or destroying any property belonging:

- a) to the University; *or*
- b) to any member when such property is on University premises or on other premises during the course of a University-sponsored activity or event.

Informal Resolution of Complaints

Consultation With the Advisor on Rights and Responsibilities

- 20. The Advisor on Rights and Responsibilities shall be impartial in the exercise of his/her functions, and shall respect the confidentiality of all parties to any matter in which the Advisor has been requested to assist.
- 21. Members of the University who believe that they have been subjected to conduct that violates this Code may consult the Advisor. The primary goal is to assist the complainant to make an informed choice as to the most appropriate method of resolution to a complaint or conflict.
- 22. Normally, a complaint should be made within two months of the alleged violation. This period may be extended at the discretion of the Advisor. If the person against whom the complaint is made (the respondent) is a member of a union, the Advisor shall inform the complainant of any delays regarding disciplinary procedures which may be prescribed in the respondent's collective agreement.
- 23. The Advisor will make a determination whether the complaint:
 - a) is not within the jurisdiction of this Code, in which case the Advisor shall, if appropriate, re-direct the complainant to the relevant channels for redress; *or*
 - b) is trivial, frivolous, vexatious or made in bad faith; *or*
 - c) is being heard, or has already been heard by another University officer, or through another University procedure; *or*
 - d) does not appear to be supported by sufficient evidence.
- 24. The Advisor may refuse to assist in informal resolution, or, in the case of complaints made against students, to proceed with a formal complaint, on one or more of the grounds listed in article 23.
- 25. Given the Advisor's agreement to proceed, the complainant shall decide upon one of the following courses of action:
 - a) to proceed with informal conflict resolution; *or*
 - b) to proceed with a formal process; *or*
 - c) to take no further action; *or*
 - d) to pursue any other course of action available at law, under a collective agreement or under any other University policies or procedures.

Procedures for Informal Resolution

- 26. Should the complainant opt to proceed with informal conflict resolution, he or she shall authorize the Advisor to take steps to attempt an informal resolution of the complaint. Such steps may take a variety of forms, for example, helping to clarify perceptions, raising awareness of the impact of certain conduct, reconciling differences or sorting out misunderstandings. The parties may be brought together or communication may be effected through the Advisor.

27. Some situations lend themselves to structured mediation. If both parties agree to try this method, the Advisor may personally act as mediator, or may assist the parties in obtaining the services of another member of the University who is qualified to perform this function.
28. Any informal agreement reached between the parties is entirely voluntary. Neither the Advisor nor any other mediator has authority to impose conditions or sanctions upon either party.
29. The complainant may withdraw the complaint at any point during the process of informal resolution. As well, the Advisor may withdraw from the informal process if he or she determines that no useful purpose will be achieved by continuing to attempt informal resolution.
30. Normally, attempts at informal resolution shall not last longer than three months.

Files of Complaints Resolved Informally

31. Upon completion of the informal process, the Advisor shall prepare a summary of the matter, but shall remove all information identifying the parties from the file.

Procedures for Adjudicating Formal Complaints Made Against Students

32. Formal complaints against students shall be adjudicated by a Hearing Panel selected from the Student Hearing Board pool.

Structure of the Student Hearing Board

33. A permanent Secretary of the Student Hearing Board (the Secretary) shall be appointed by the Rector. The Secretary shall be responsible for the administrative functioning of the Student Hearing Board and shall maintain the confidential files and recordings of proceedings of the Student Hearing Board.
34. A permanent Selection Committee shall be struck by the Secretary. It shall be composed of the Secretary, the Dean of Students and a representative from each of the recognized student associations. The Selection Committee shall recruit, screen and appoint student members to the pool of the Student Hearing Board. The Selection Committee shall also appoint the Chair and Alternate Chair(s) of the Student Hearing Board.
35. Normally, appointments shall be made for a two-year term which is renewable. The terms shall run from June 1 to May 31. Every effort shall be made to stagger the appointments so as to ensure continuity.
36. The role of the Chair and Alternate Chair(s), outlined below, requires impartiality and particular skills which take time to develop and cannot easily be acquired by lay persons during a brief term of office. As such, the Chair and Alternate Chair(s) shall normally be selected from qualified alumni or emeriti who have training in law or tribunal procedures as well as some knowledge of the University environment.
37. A minimum pool of six (6) students composed of both undergraduate and graduate students shall be maintained, any three of whom shall sit on a given Hearing Panel as selected by the Secretary.
38. The members of the Student Hearing Board shall receive annual training, prepared and conducted jointly by the Advisor, the Director of Advocacy and Support Services and the University Legal Counsel. Student panellists shall receive training before being selected to serve on any panel.

Initiating a Formal Complaint Against a Student

39. A complainant may opt to proceed directly to a formal complaint at the outset (article 25) or after an attempt at informal conflict resolution has been unsuccessful. If the Advisor has refused to proceed with a formal complaint on the grounds listed in article 23, the complainant may appeal such a refusal by submitting a request in writing. The Advisor shall forward the request, together with a written explanation of the refusal, to the Secretary of the Student Hearing Board, who shall convene a Hearing Panel to decide the issue. The decision of a Hearing Panel is final.
40. In the event that a formal complaint proceeds, the following articles shall apply:
41. The Advisor shall inform the complainant of the following:
 - a) the required format for submitting the complaint, which must be made in writing, signed and dated, and must identify the respondent and the precise nature of the complaint;

- b) the procedures which shall be followed by a Hearing Panel;
 - c) the right of the complainant and the respondent to consult any person in the preparation of his or her case, and to be accompanied or represented before a Hearing Panel by any member of the University community. If the complainant is a student, he or she also has the option of obtaining an advisor through the services of Advocacy and Support Services;
 - d) the right of appeal.
42. Upon receipt of the written complaint, the Advisor shall immediately notify the respondent. The respondent shall receive a copy of the complaint together with the information detailed in article 41 b), c) and d). Any written notice addressed to a student under this Code shall be sent by courier to the last address provided by the student to the University and shall be deemed to be received one (1) day after sending.
43. Concurrent with the notification sent to the respondent, the Advisor shall notify the Secretary who shall convene a Hearing Panel to hear the matter. Thereafter, the Secretary shall be responsible for all communications with the complainant and the respondent.
44. A Hearing Panel shall be convened as soon as possible after receipt of the notification by the Secretary and normally within twenty-five (25) working days.
45. Once a hearing date is fixed by the Secretary, the complainant shall submit any additional documentation substantiating his/her case to the Secretary no later than fifteen (15) working days before the scheduled hearing date. Such documentation shall include any supporting documents and a list of the witnesses, if any, that will appear. The Secretary shall forward the documentation together with a list of the panellists selected for the case to the respondent no later than ten (10) working days before the scheduled hearing date. The list of panellists shall also be sent to the complainant.
46. Either party may object to the participation of a panellist on the grounds of potential bias. A reasoned objection shall be filed with the Secretary who shall arrange for an alternate panellist to serve if he or she determines that the objection is well founded. If the Secretary feels that the objection is frivolous and the matter cannot be resolved, the issue shall be forwarded to the Chair of the Student Hearing Board who shall render a final decision in this regard.
47. A settlement may be agreed to by the parties at any time prior to the hearing. The Advisor shall be informed of the general substance of the settlement.

The Hearing

48. The Student Hearing Board shall establish its own rules of procedure. Minimally, these rules shall provide for opening statements by the parties, the presentation of evidence and witnesses, the right of cross-examination, questioning by members of the Hearing Panel, representations with respect to desired sanctions and closing statements. Hearings shall be recorded, and the cassette kept as part of the permanent record of proceedings.
49. The role of the Chair shall be to preside over the proceedings, keep order and ensure fairness. The Chair shall, as well, preside over the deliberations of the Hearing Panel but shall not vote.
50. The hearing shall be closed and confidential unless both parties have consented in writing to the attendance of members of the University community.
51. The Hearing Panel shall provide a signed, dated and reasoned decision. The standard of proof to be relied upon by the Hearing Panel shall be one of a "balance of probabilities".

Sanctions

52. The Hearing Panel may impose one or more of the following sanctions:
- a) a written reprimand;
 - b) imposed conditions. The Hearing Panel does not, however, have the authority to suspend a student from any academic activity;
 - c) payment as compensation for damage or loss of property or otherwise rectify a situation which the student created or helped to create;
 - d) a fine not exceeding \$500;
 - e) specified volunteer community service at Concordia University of up to ten (10) hours per week for a specified period of time;
 - f) subject to confirmation by the Rector or designate, suspension or expulsion.
- The execution of any sanctions shall be suspended until the expiry of the delay to file an appeal (see article 56) or until the rendering of the decision by the Appeals Committee if an appeal is heard. All monetary sanctions shall be payable within ten (10) working days of the delays set out in this paragraph.

53. The decision of the Hearing Panel shall normally be rendered within ten (10) working days of the hearing and shall be communicated in writing to both parties and the Advisor.
54. The administration and monitoring of the sanction(s) imposed shall be the responsibility of the Dean of Students. Failure to pay any monetary sanction imposed within the delay prescribed in article 52 shall result in the amount being added to the respondent's student account. Should the respondent fail to comply with any non-monetary sanction, the Dean of Students may recommend to the Rector that the student not be permitted to re-register, be suspended, or that his or her diploma be withheld until such time as the respondent has fully complied with the sanction(s) imposed.

Appeals

55. A party who wishes to appeal a decision or sanction of the Hearing Panel, or both, shall apply in writing to the Appeals Committee of the Board of Governors for the authorization to lodge an appeal. An Appeals Panel, composed of three (3) members of the Appeals Committee selected by the Chair of the Appeals Committee, shall decide whether an appeal shall be heard, having regard to the circumstances of each case.
56. Such request for authorization to appeal shall be submitted to the Secretary of the Appeals Committee no later than fifteen (15) working days after the date of transmission to the parties of the decision of the Hearing Panel.
57. Such request may be based only on the grounds of discovery of new evidence following the rendering of the decision of the Hearing Panel or on the presence of serious and prejudicial procedural defects. The request shall state in clear and precise terms the grounds on which the appeal is based.
58. If the authorization to appeal is granted, the appeal shall be heard either by the same Appeals Panel which authorized the appeal, or a new Appeals Panel as determined by the Chair of the Appeals Committee, and notification of such shall be sent to both parties.
59. The Appeals Panel has the authority to confirm, reverse or modify the decision being appealed. Further, should the appeal be based on the production of new evidence, the Appeals Panel may order a new hearing of the complaint by a new Hearing Panel.
60. The decision of the Appeals Panel shall be signed, dated and reasoned, and shall be sent to both parties, the Student Hearing Board Secretary, the Advisor and the members of the Hearing Panel who presided at the hearing of the complaint.
61. The decision of the Appeals Panel shall be final.

Files of Formal Complaints Against Students

62. The Advisor shall maintain a file of all formal complaints processed. The file shall include the written complaint, the decision of the Hearing Panel and the decision of the Appeals Committee, if any. If a settlement is reached prior to a hearing, the general substance of the settlement shall be included in the file. If the complaint is withdrawn at any stage of the formal process, a notation to that effect shall be recorded, but all information identifying the parties shall be removed from the record.

Procedures for Adjudicating Formal Complaints Made Against a Faculty, Administrative or Support Staff Member

63. Formal complaints made against a faculty, administrative or support staff member shall be adjudicated according to the provisions of the respondent's collective agreement or the relevant University policy.
64. A complainant may opt to proceed directly to a formal complaint at the outset (article 25) or after an attempt at informal conflict resolution has been unsuccessful.

Initiating a Complaint Against a Faculty, Administrative or Support Staff Member

65. The Advisor shall provide the complainant with the following information:
 - a) the required format for submitting the complaint, which must be made in writing, signed and dated, and must identify the respondent and the precise nature of the complaint;
 - b) the identity of the authority to whom the complaint shall be submitted under the terms of the respondent's collective agreement or the relevant University policy;
 - c) the right of the complainant to consult any person in the preparation of his or her case, and to be accompanied or represented by any member of the University during the process of resolution. If the complainant is a student, he or she may opt to be

accompanied by an advisor obtained through the services of Advocacy and Support Services. If the complainant is a member of a union, he or she may opt to be accompanied by a union representative.

66. The complainant shall submit the written complaint to the authority identified in article 65 b). The authority shall take the necessary steps to resolve the matter in such a manner as to respect the principles of natural justice and the procedures of any collective agreement or University policy which may apply. Hereinafter, the authority is responsible for all communication with the complainant and the respondent.

Communication of the Decisions Taken

67. When the matter has been decided, the authority shall notify both the complainant and the Advisor of the general substance of the decision or action that was taken as a result of the complaint.
68. If the decision or action taken by the authority does not constitute a disciplinary action as defined by the relevant collective agreement or University policy, the authority shall monitor compliance by the respondent. Once satisfied that compliance has been effected, the authority shall so inform the complainant.
69. If disciplinary action is taken and is subsequently overturned by a higher authority or by grievance and arbitration procedures, the complainant and Advisor shall be notified.

Files of Formal Complaints Against Faculty, Administrative and Support Staff Members

70. The Advisor shall maintain a file of formal complaints received against faculty, administrative or support staff members, which shall summarize the substance of the consultation with the complainant, the record of resolution as supplied by the authority and information that a sanction has been overturned through grievance or arbitration, if this is the case.

Urgent Measures

71. The University's response to any urgent situation involving threatening or violent conduct shall be coordinated by the Advisor. He or she shall take the necessary steps to convene an Ad hoc case management team (the Team) and shall thereafter coordinate the activities of the team until the situation has been resolved.
72. The Advisor's role shall be limited to that of coordination and facilitation, where necessary advising and supporting all those affected by the incident, and acting as the central link for intra-University communications relating to the incident.
73. The Advisor and the Team shall be guided by the *Protocol for the co-ordination of urgent cases of threatening or violent conduct* (the Protocol).
74. The Advisor shall be responsible for ensuring that the Protocol is revised and updated as needed, and to this end, shall consult whatever experts are appropriate. Revisions of the Protocol shall be submitted to, and approved by, the Rector.

Reporting and Responding to Urgent Situations

75. Members who are faced with an urgent situation involving threatening or violent conduct, where there is reasonable cause to believe that the safety of persons may be threatened, shall immediately contact the Security Department. The Security Department shall take whatever action is necessary to secure the safety of persons, and shall alert the Advisor to convene a Team as necessary.
76. Members shall report to the Advisor any conduct which they have reasonable cause to believe potentially threatens the safety of persons. The Advisor shall assess the situation as specified in the Protocol, consulting experts as necessary, and make recommendations as to any further action appropriate in the circumstances.
77. Any member of the University who is called to a team meeting shall respond promptly.

Temporary Suspension

78. Where a member of the faculty or administrative and support staff presents a clear and present danger to the safety of persons or to the activities of the University as a whole or of any of its individual members, the matter shall be dealt with according to the provisions of the relevant collective agreement or University policies.

79. A member against whom such action is taken may seek recourse through the grievance procedures of the relevant collective agreement or the grievance procedures contained in University policies.
80. Where a student member presents a clear and present danger to the safety of persons or to the activities of the University as a whole or of any of its individual members, the Rector or his or her delegate may suspend the student on a temporary basis, exclude the student from any University premises and take any other steps that may be appropriate. The suspending officer shall notify the Registrar, the relevant Dean and the Security Department of the terms of the suspension.
81. In such a case, the suspending officer shall immediately lay a complaint against the student under articles 40 to 54 of this Code. The regular delays of this Code shall not apply, and a preliminary hearing shall be convened by the Secretary of the Student Hearing Board within five (5) working days of the suspension order. The purpose of the hearing shall be solely to determine whether or not sufficient reason exists for the suspension. The Hearing Panel shall render its decision and inform the parties immediately following the preliminary hearing.
82. Should the suspended student be unable to attend the hearing within the prescribed delay, he or she shall notify the Secretary as soon as he or she is able to attend a hearing. Upon such notification, the Secretary shall convene a hearing as soon as possible.
83. In the event that the temporary suspension is upheld by the Hearing Panel, a further hearing into the complaint shall be held within ten (10) working days of the preliminary hearing. The Hearing Panel shall render its decision and inform the parties within three (3) working days of the hearing. The suspension shall continue until the decision has been rendered.
84. In the event that the suspension is not upheld by the Hearing Panel at the preliminary hearing, the hearing into the complaint shall proceed according to the normal delays specified in this Code.
85. In the event that the temporary suspension is not upheld, or the Hearing Panel determines that the complaint is unfounded, that decision shall not invalidate the suspending officer's prior action. However, every effort shall be made to remedy any academic disadvantage that the student may have experienced as a consequence of the temporary suspension.
86. Upon the lifting of the suspension, the Secretary shall notify the Registrar, the relevant Dean and the Security Department.

Retention of Files

87. All complaint files maintained by the Advisor shall be confidential and accessible only to the staff of the Office of Rights and Responsibilities. Such files shall be destroyed according to a retention schedule determined in accordance with provincial legislation.

Appointment and Functions of Advisor

88. The Advisor on Rights and Responsibilities shall be appointed by the Rector upon the recommendation of an advisory committee struck for this purpose. The Advisor shall report to the Rector.
89. The appointment shall be made for an initial term of two years, renewable for further terms of five years. During the fourth year of each such term the Rector shall appoint an appraisal committee which shall review the operations of the Office of Rights and Responsibilities and make recommendations to the Rector. This review shall include, but not be limited to, consultations with the internal community as well as external appraisal.
90. The Advisor shall direct the operations of the Office of Rights and Responsibilities, and carry out all duties described in this Code.
91. The Advisor shall submit an annual report to the Rector by September 30 of each year. The report shall detail the activities of the Office of Rights and Responsibilities, including statistics on all complaints received, and make recommendations, as necessary, with regard to either the Code of Rights and Responsibilities or the operations of the Office. The annual report shall be published in the University's newspaper.

Complaints Relating to Operations of the Office of Rights and Responsibilities

92. If a member considers that the Advisor has failed to follow the procedures outlined in this Code, with respect to any matter to which the member has been a party, he or she may submit a written complaint, detailing the alleged procedural failure, to the Rector. The Rector shall investigate the complaint and inform the member of the results of the investigation.

*The Advisory
Committee on Rights
and Responsibilities*

93. The Rector shall appoint an Advisory Committee on Rights and Responsibilities (the Committee) composed of the following members:
 - one (1) student member, nominated by the undergraduate student association;
 - one (1) student member, nominated by the graduate student association;
 - one (1) administrative and support staff member nominated by the electoral college;
 - one (1) full-time faculty member nominated by the full-time faculty association;
 - one (1) part-time faculty member nominated by the part-time faculty association;
 - the Advisor, ex-officio;
 - a delegate of the Rector as Chair.
 94. Appointments shall be for two years, renewable for one further term.
 95. The mandate of the Committee shall be to:
 - a) assist in the development and implementation of activities to disseminate information about this Code, as envisaged in article 9;
 - b) make recommendations to the Rector on the continued development of the Code of Rights and Responsibilities, as necessary;
 - c) receive the annual report and make any representations to the Rector with regard to its content, as necessary.
 96. The Committee shall meet at the call of the Chair, or at the call of any three (3) members of the committee, but no less than twice per academic year.
 97. The Advisor shall respect the confidentiality of all nominative information relating to cases or complaints during discussions with the Committee.
-

17.20

OMBUDS OFFICE

Ombudsperson
KRISTEN ROBILLARD

Location
Sir George Williams Campus
Ombuds Office
Annex PR, Room: 100
(514) 848-4964

TERMS OF REFERENCE OF THE OMBUDS OFFICE

Scope

Scope

1. The Ombuds Office shall be independent of all existing administrative structures of the University. The Ombudsperson may help to resolve problems informally and may inquire into any University-related concerns or complaints. As well, he or she may inquire into the application of any policy, rule or procedure of the University. However, he or she may not inquire into the application or interpretation of a collective agreement, nor into the alleged violation of the duty of fair representation against a certified union. The Ombudsperson may make any recommendations he or she deems appropriate with regard to resolving problems or improving policies, rules or procedures. However, he or she shall have no actual authority to impose remedies or sanctions, or to enforce any policy, rule or procedure.

Functions

Functions of the Ombuds Office

2. Specifically, the Ombudsperson shall:
 - a) inform University members about existing policies, rules and procedures, and advise them as to the appropriate channel of redress for any concern or complaint they may have;
 - b) assist University members to resolve complaints informally and quickly;
 - c) at his or her discretion, conduct an independent and objective inquiry into complaints when normal channels of recourse have been exhausted;
 - d) explain decisions taken by University decision-makers when complaints are not substantiated;
 - e) at his or her discretion, recommend solutions when complaints are found to be valid;
 - f) bring to the attention of those in authority any policies, rules or procedures which appear unclear or inequitable or which might jeopardize the rights or freedoms of any members of the University. The Ombudsperson may suggest changes to the existing policies, rules or procedures or offer advice on the development of new policies, rules or procedures.

Special Concerns of the Ombuds Office

3. In dealing with inquiries, the Ombudsperson shall be concerned that all members of the University are dealt with and deal with others fairly, and more specifically that:
 - a) decisions affecting members are made with reasonable promptness;
 - b) procedures used to reach decisions are adequate and the criteria and rules upon which such decisions are based are appropriate;
 - c) procedures and criteria used in making decisions are clearly communicated to those affected.

Procedures

Procedures

4. The Ombudsperson shall have immediate access to such University records, reports or documents as are required to fulfil his or her functions. Requests for such access shall receive priority from all members.
5. If the Ombudsperson decides to inquire into a matter, he or she shall make every effort to consult the relevant parties and give such parties the opportunity to reply, should they so wish.
6. Upon the conclusion of an inquiry, the Ombudsperson shall advise all parties to a complaint of his or her findings and any recommendations that he or she has formulated.

7. In addition, the Ombudsperson may bring his or her findings to the attention of those in authority and make whatever recommendations he or she deems appropriate and to whomever within the University he or she feels should receive them. Such recommendations may bear either on the actions or decision of an individual or a group, or on the policies, rules and procedures which gave rise to them. If, upon receipt of such findings or recommendations, a University authority proceeds to disciplinary action in order to resolve the matter, the procedure of any relevant University policy or collective agreement shall be followed.
8. The Ombudsperson may refuse to take up any case where he or she judges his or her intervention would be inappropriate and may withdraw from a case if continued involvement is ill-advised.
9. If the Ombudsperson refuses to take up a case or withdraws from a case, he or she shall, on request, provide the applicant with a written statement of the reason.
10. The Ombudsperson shall avoid involvement in cases where there may be conflict of interest.

Confidentiality

11. Should the pursuit of any inquiry necessitate the disclosure of details that identify an applicant, the applicant shall be informed. Any disclosure shall be limited to those who have a need to know.
12. Should an applicant decide to withdraw an application in order to protect his or her anonymity, the Ombudsperson shall respect this decision.
13. The Ombudsperson shall respect the confidentiality of any confidential information or materials to which he or she has access.
14. Should the Ombudsperson consider that the response to his or her recommendation has been unsatisfactory, he or she shall be entitled to make the recommendation public, provided always that, subject to Article 11, the confidentiality of the applicant is respected.

Files

15. The Ombudsperson shall maintain suitable records of complaints, findings and recommendations which shall be accessible only to the staff of the Ombuds Office. Such files shall be destroyed according to a retention schedule determined in accordance with provincial legislation.

Appointment of Ombudsperson

16. The Ombudsperson shall be appointed by the Rector upon the recommendation of an advisory committee struck for this purpose. The Ombudsperson shall report to the Rector.
17. The appointment shall be made for an initial term of two years, renewable for further terms of five years. During the fourth year of each such term, the Rector shall appoint an appraisal committee which shall review the operations of the Ombuds Office. This review shall include, but not be limited to, consultations within the internal community as well as external appraisal.
18. The Ombudsperson shall submit an annual report to the Rector by September 30 of each year. The report shall detail activities of the Ombuds Office, including statistics on complaints received, and shall make recommendations, as necessary. The Rector shall ensure that the appropriate administrators consider and respond to the recommendations contained in the report.
19. The annual report shall be published in the University's newspaper.

Complaints Relating to the Operations of the Ombuds Office

20. If a member considers that an Ombudsperson has committed a procedural or substantive violation of these terms of reference, with respect to any matter to which the member has been a party, he or she may submit a written complaint, detailing the alleged violation, to the Rector. The Rector shall investigate the complaint and inform the member of the results of the investigation.



student life and student services

- 18.1**

STUDENT LIFE AND STUDENT SERVICES

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Student Services Mission

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Concordia Council on Student Life (CCSL)

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Gouvernement du Québec Student Loans and Bursaries

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Concordia University Scholarships and Bursaries

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International Students

18

STUDENT LIFE AND STUDENT SERVICES

Dean of Students
DONALD L. BOISVERT

Director of Counselling and Development
SUP MEI GRAUB

*Director of Financial Aid and Awards, and
Assistant Dean of Students (Assessment)*
ROGER CÔTÉ

Director of Health Services
MELANIE DREW

Director of Advocacy and Support Services
ANN KERBY

Director of Recreation and Athletics
HARRY J. ZARINS

18.1 STUDENT LIFE AND STUDENT SERVICES

18.1.1 *Student Services' Mission*

Concordia Student Services, in addition to supporting the University's mission of accessibility, fulfils a dual function: to provide students with the support services they need to succeed academically, and to address students' developmental needs and concerns. A wide range of activities and services are available to help students cope with challenges in these and other areas. The overall aim of all programs is to ensure that students can make the most of their university experience. The staff is dedicated to creating a positive learning environment which values the diversity that characterizes the Concordia community. As professionals, we believe this is best achieved through an integrated and complementary approach to student life, which values the student both as individual person and as learner.

18.1.2 *Concordia Council on Student Life (CCSL)*

The Council, a body responsible for Student Services programs, policies and budgets, studies the range of student life on both campuses. It is composed of nine students, two faculty members, and eight members of the Student Services staff. The Dean of Students chairs the Council. Its meetings are open to all members of the University community.

18.2 DEAN OF STUDENTS

Loyola Campus
Administration Building, Room: AD 121
(514) 848-3535

Sir George Williams Campus
Hall Building, Room: H 653
(514) 848-3517

The Dean of Students oversees Student Services including Advocacy and Support Services, Counselling and Development, Financial Aid and Awards, and Health Services. The Dean of Students Office is the principal resource at the University for the interpretation and regulation of policies and procedures as these apply to the non-academic aspects of student life. Student associations and groups, of whatever nature, are one of the primary means by which students can relate meaningfully to the institution. By providing liaison with and support to student groups and their governing bodies, the Dean of Students encourages students in the conduct of their own collective affairs, and facilitates the growth of student associations and the active involvement in them by students.

<http://deanofstudents.concordia.ca>

18.2.1 *Social and Cultural Activities*

Social and Cultural Activities
A wide variety of social and cultural events is presented regularly by various student organizations and departments. The Concordia orchestra and choir are open to students, and they perform several concerts annually. There is a students' cafeteria and pub on each campus, as well as lounge facilities and games rooms.

18.3 ADVOCACY AND SUPPORT SERVICES

Advocacy and Support Services supports the self-development of students in exercising their own rights, works towards an environment which is open to constructive criticism, advocates against

discrimination, and encourages responsible change. The following units listed under Section 18.3 form the Advocacy Sector.

Loyola Campus
Administration Building, Room: AD 130
(514) 848-3509

<http://advocacy.concordia.ca>

18.3.1
*Legal Information
Services*

Advice and help are offered to students requiring assistance on matters relating to their legal rights. Commissioners of Oaths are also available.

Loyola Campus
Administration Building, Room: AD 130
(514) 848-4960

<http://advocacy.concordia.ca/Legal>

18.3.2
Child Care

Child care services are offered for children of students, faculty, and staff.
On the Sir George Williams Campus, parents may enrol children 18 months to five years of age in the *Centre de Petit Enfance Concordia*. Application forms and details may be obtained at the Information Desk in the Hall Building or at the daycare.
La Garderie Les P'tits Profs is located on the Loyola Campus. Parents may enrol children three months to five years. For more information about this child care service please contact the centre directly.
Financial assistance for child care expenses is available for eligible students through the Québec Financial Aid — Loans and Bursaries program and through the *ministère de la Famille et de l'enfance*.

Loyola Campus
La Garderie Les P'tits Profs
Annex BB
(514) 848-7788
<http://alcor.concordia.ca/~glpp/>

Sir George Williams Campus
Centre de Petit Enfance Concordia
Annex DC
(514) 848-8789
<http://advocacy.concordia.ca>

18.3.3
Campus Ministry

Campus Ministry offers a wide range of programs and services for the University community. Chaplains work with students, staff, and faculty, integrating concerns and interests into discussions, studies, and prayer. It is a multi-faith ministry, with a network of resources from several religious traditions. Chaplains are available for personal appointments. Offices on both campuses are the venue for most Campus Ministry programs and events, and are also a place for students to drop in to read or find a quiet space. The Loyola Chapel is also available for private reflection, as well as being a place for public worship on Sundays and weekdays.

Loyola Campus
Annex WF
(514) 848-3588

Sir George Williams Campus
Annex Z
(514) 848-3591

<http://advocacy.concordia.ca/Ministry>

18.3.4
*Services for Disabled
Students*

Students with visual or hearing impairments, mobility limitations, or learning disabilities may require special services while studying at Concordia. Services include orientation, tutors, notetakers, and classroom relocation. Tape recorders, FM personal systems, and personal computers with voice and Braille output are available for on-campus use. All students with disabilities are advised to contact the coordinator as early as possible for assistance in meeting their special needs. Students using interpreter services, attendant care, or requiring identification to their professors must contact the Services for Disabled Students prior to the beginning of classes.
Students requiring special accommodation for examinations must contact the Services for Disabled Students at the beginning of each semester. All arrangements are contingent upon submission of appropriate documentation. It is the responsibility of the student to submit recent documentation, request exam accommodations, and verify specific exam arrangements with the Services for Disabled Students. All accommodations must be exam specific as well as disability specific.

Learning Disability

Students who have recent documents attesting to a learning disability or who believe they may have a learning disability are advised to contact the Services for Disabled Students immediately upon admission to the University. While not every learning disability can be effectively accommodated within a university setting, learning strategies and, where appropriate, special assistance to support

students in their academic program will be offered. Individualized examination arrangements can be provided to students with relevant assessments. These arrangements must be made with the Services for Disabled Students Office well in advance of the scheduled examination.

Loyola Campus
Administration Building, Room: AD 130
(514) 848-3536/Voice & TDD

Sir George Williams Campus
Hall Building, Room: H 580
(514) 848-3525/Voice & TDD

<http://advocacy.concordia.ca/Disabled>

18.3.5
International Students

The International Students Office is responsible for providing special programs and services to promote and support the growth and development of International students. For additional information, see §19.

Sir George Williams Campus
Hall Building, Room: H 653
(514) 848-3515

<http://advocacy.concordia.ca/International>

18.3.6
Centre for Native Education

The Centre for Native Education offers support services and resources to Native students at Concordia. The Centre is a welcoming space where Native students can meet to plan social activities or just relax between classes. Staff and faculty are available to address individual needs and provide support and encouragement for all Native students at Concordia to continue with their program and achieve their highest potential. The Centre also seeks to increase awareness of Native issues and increase the knowledge of Native cultures among the Concordia community. Native students may access the Centre's academic programs and services, including study rooms and computers, tutoring, and photocopy services.

Sir George Williams Campus
Annex V, Room: 303
(514) 848-7326

<http://advocacy.concordia.ca/Native>

18.3.7
Student Advocate Program

Student advocates are currently registered at Concordia and trained in University rules and regulations. They are students from various disciplines and backgrounds, dedicated to helping their peers. Student advocates can act as representatives in both academic and non-academic cases. They can accompany students to hearings and appearances before committees. Student advocates can assist with student requests, grade re-evaluation applications and appeals, and can provide information and referral to University resources.

Loyola Campus
Administration Building, Room: AD 130
(514) 848-3509

http://advocacy.concordia.ca/Student_Advocate

18.3.8
Peer Support Program

The Peer Support Program is a student-staffed listening and referral centre for Concordia students. The service is free and confidential. Peers receive intensive and ongoing training so they can help students clarify problems and can make appropriate referrals. Peers also facilitate a number of outreach programs and discussion groups.

Sir George Williams Campus
Annex Z, Room: 02
(514) 848-3859

http://advocacy.concordia.ca/Peer_Support

18.4 COUNSELLING AND DEVELOPMENT

Counselling and Development helps ensure **student success**, including smooth transition into and out of the University. Friendly, professional staff help students deal with personal, academic, and career concerns. As well, a wide variety of workshops for students are offered free of charge throughout the school year.

Services are available for students from all cultural backgrounds and sexual orientations. Services are offered in groups or individually, in English and French.

Loyola Campus
2490 West Broadway, WC 101
(514) 848-3555

Sir George Williams Campus
Hall Building, Room: H 440
(514) 848-3545

Monday to Friday: 9 AM to 5 PM*
*Summer hours vary.

Monday to Thursday: 9 AM to 8 PM*
Friday: 9 AM to 5 PM

<http://cdev.concordia.ca/CnD/cndstart.html>

18.4.1 Student Success Centre

The Student Success Centre offers a wide range of programs designed to ensure success at Concordia. A Student Welcome Room (H 481) offers personalized contact and information about university services important to student success.

- *Smart Start Program* — Smart Start, a welcoming program for new students, is offered at the beginning of each semester to help students make the transition to university.
- *Success Check-up* — The Student Success Inventory aids students in discovering what they need in order to excel.
- *Student Success Workshops* — Students build skills for success through workshops such as “Mastering Academic Stress” and “Achieving Academic and Personal Goals”.
- *Learning Disabilities Screening Test Program*.

18.4.2 Counselling Service

Professional counsellors, accredited psychotherapists and psychologists offer Concordia students educational, career, and personal counselling; individually or in groups.

Personal Counselling and *Short-term Psychotherapy* help students who are experiencing difficulties to clarify personal issues and find effective ways of dealing with them. Confidentiality is ensured.

Personal Development Workshops are offered during the Fall and Winter semesters and can help with building relationships; communicating; planning one’s life and career; understanding oneself and others; coping with incest, loss, alcoholism, stress; dealing with gay, lesbian, and bisexual issues.

Educational Counselling offers help to all Concordia students who want to plan their university education and choose courses suited to their interests and aptitudes.

Career Counselling can help students carry out job search and make career choices based on their interests, skills, and abilities.

The Career Computer Lab enables students to assess their interests and aptitudes using specially designed software.

Vocational Testing is available to help both graduate and undergraduate students to assess their academic and career interests as well as their personal preferences.

18.4.3 Student Learning Services

Student Learning Services offers assistance to all Concordia students who want to improve their academic skills and learning potential.

Learning and Study Skills Specialists offer help to students on an individual basis to assess and develop their academic skills.

Peer Math Assistants offer help in small groups for students enrolled in basic Math courses.

Peer Writing Assistants offer individual help with writing to students in all faculties and at all levels.

Workshops are available to help students in such areas as study skills, academic reading and writing, time management, oral presentations, and exam anxiety.

18.4.4 Career Resource Centre

The Career Resource Centre provides a wide spectrum of educational, career, and employment information in print and electronic format to help students orient their future. Compilations of top Internet sites on all these subjects are available.

The Education Collection, worldwide in scope, includes profiles and rankings of universities, university calendars, program directories, and sources of financial aid.

Career Information includes career encyclopedias, and books and pamphlets on such topics as individual occupations, labour-market trends, and salaries.

Job Search Resources include information on researching occupations and potential employers. It also includes books on such topics as designing résumés, writing cover letters, preparing for job interviews, conducting an electronic job hunt, and job hunting techniques.

Test Applications and Study Books are available to help students prepare for and take tests such as MCAT, LSAT, GMAT, and TOEFL.

Personal Development Resources include a variety of self-help books on such topics as study skills, time management, assertiveness training, coping with stress, and dealing with personal relationships.

18.4.5
Career and
Placement Service
(CAPS)

CAPS helps students prepare for and gain entry into the labour market. It is an important link between university life and the “real world”. CAPS offers both personalized and Internet services that can help students find jobs that match their qualifications.

Employment Assistance can help students identify their job skills and learn how to present themselves in response to labour-market demands. Individual appointments, as well as information sessions and group workshops, are offered in the areas of job search, résumé writing, and interview preparation. *Student Placement Assistants* (SPAs), a team of trained and supervised students, offer résumé check-up services.

Employment Opportunities are available on CAPS Web sites for students seeking summer, part-time, and full-time positions.

A *job search Internet computer lab* is available at CAPS offices.

An *electronic résumé bank* enables CAPS to quickly refer students to employers.

On-Campus Recruiting: During their last year of studies, students can apply for entry-level positions offered by large corporations that conduct annual recruiting campaigns in the fall and winter. Students can consult the list of campus recruiters available through links on the CAPS Web site.

Sir George Williams Campus
2070 Mackay, EN 109
(514) 848-7345

Monday to Friday: 9 AM to 5 PM — *Summer hours vary*

<http://cdev.concordia.ca/CnD/careerservices/CAPS/capsframe.html>

18.4.6
New Student
Program

The New Student Program Office was created to help new students make a successful transition to university life and to help resolve any problems that may be encountered during their first year of university. Some of the programs offered are Smart Start, (in conjunction with Counselling and Development), the New Student Drop In, Peer Connections, and Orientation. Orientation is designed to familiarize students with the various facilities and services available to them, and to provide essential information such as academic requirements and the rights and responsibilities of all members of the Concordia community. The Office publishes *The Bridge*, a newspaper filled with information and articles of particular interest to new students. *The Bridge* is mailed directly to every new student approximately four times a year.

18.5 HEALTH SERVICES

Health Services is an on-campus clinic and health promotion centre. The staff, which includes nurses, family physicians, psychiatrists, psychotherapists, a dermatologist, support staff, a health educator and peer health educators, work collaboratively to provide students with high-quality personalized health care and health education.

Medical Condition and Academic Responsibilities: If medical problems or concerns are interfering with a student's ability to attend class, complete assignments, or write exams, Health Services can work with the student to assess the problem and review ways in which it can be of assistance.

Confidentiality: All services are strictly confidential. Information is only released with the student's written authorization. This policy applies regardless of whether the information is requested by family members, community physicians, therapists or University officials.

18.5.1
Services Offered

Many services are offered through Health Services. For those which are not offered (i.e. dental and eye care), Health Services can provide references to outside resources that often give discounts to Concordia students.

The services offered include:

- medical evaluation, treatment, and consultation;
- general medical care for injuries and illnesses such as cuts, minor suturing, sprains and strains, colds, flu, exacerbation of asthma;
- preventive medical care, including immunizations and annual physicals;
- gynecology, birth control, morning after pill, pregnancy tests, and pregnancy continuation or abortion referrals;
- Sexually Transmitted Disease (STD) assessments, cultures, treatment, and safer sex education;
- HIV non-nominal testing which includes pre- and post-test counselling;
- allergy injections (after allergy evaluation has been assessed and treatment prescribed by allergist);
- dermatology, including liquid nitrogen treatments for wart removal;
- nutrition and body image counselling and education;

- psychiatry and psychotherapy;
- drug and alcohol consultation and referrals for substance abuse.

How to Use Health Services: Using Health Services is easy. Students may call ahead to make an appointment for predictable issues or concerns such as a physical examination, prescription renewal, or health education. For more urgent health-care needs, students may come into one of the walk-in clinics where patients are seen on a first-come, first-served basis. Calling ahead first for information on waiting time is a good idea in order for students to plan their time.

18.5.2
Health Insurance

Most of the services offered at Health Services are free of charge provided students have a current Concordia I.D. card and valid health insurance. For visits with a nurse or the health educator, students will be asked to show their Concordia I.D. card.

For physician visits, proof of Québec Health Insurance plan coverage, coverage from their province, or International Student Insurance is required. If students do not have a valid health card, Health Services will provide them with a physician appointment, but will have to charge a service fee. Further information about coverage is available at Health Services at 2155 Guy Street, room ER 407. Health Services has an information pamphlet on how to obtain a valid health card which should be presented at all times.

Out-of-Province Students: To retain health coverage while studying at Concordia, out-of-province students must notify their provincial health authority of their status as a student in Québec. This must be done at the beginning of each academic year. Information on how to accomplish this can be obtained through Health Services.

18.5.3
*Health Promotion/
Health Education*

Health Services believes in health education, health promotion, and informed health care consumerism. It offers discount prices on a wide variety of items: condoms, dental dams, latex gloves, spermicidal foam, finger splints, first aid kits, band-aids, ace bandages slings and oral thermometers. Health Services maintains a lending library which is stocked with hundreds of books, relaxation tapes and videos. The health educator at Health Services, along with other Health Services staff and the peer health educators, bring health promotion information to students through the monthly newsletter *Health Notes* and regular health information kiosks in the Hall Building or at Loyola.

18.5.4
*Loyola Health
Services*

The Information and Referral Centre at the Loyola Campus ensures access to health care and health information on the Loyola Campus. The Centre is staffed by a nurse who can provide many of the services offered at the SGW Health Services. Appointments for the SGW Health Services can also be made through the Loyola Health Services.

Loyola Campus Information and Referral Centre
Administration Building, Room: AD 121-3
(514) 848-3575
(514) 848-2833 (fax)

Office Hours:
Monday to Friday: 9 AM to 4:30 PM*
*Closed for lunch between 11:30 AM and 1 PM

Sir George Williams Campus
Annex ER, Room: 407
(514) 848-3565
(514) 848-2834 (fax)

Office Hours:
Monday to Friday: 9 AM to 5 PM
Accommodations may be made for evening appointments.

<http://health.concordia.ca>

18.5.5
*Residences and
Off-Campus Housing*

RESIDENCES — Loyola Campus Only

Hingston Hall is a modern dormitory style co-ed residence which houses 144 students. Rooms are furnished. Communal kitchens and public telephones are on each floor. Lounges have colour T.V.'s and the games room has pool tables. Laundry facilities, personal mailboxes, two computers, and a piano are located in the building for students' use. Many activities and outings are organized by resident students.

By law, students are required to sign leases. These leases will follow the academic year (September to May). Students wishing to contract for only one semester can apply for special arrangements.

Residence Fees

The 1997-98 room rates were as follows: (These rates do NOT include meal service.)

Single Room \$2,035.20
 (\$254.40 a month)

Double Room \$1,761.52
 (\$220.19 per person a month)

While effort will be made to meet special requests for specific rooms, assignments will depend upon availability of space. Since the number of rooms is very limited, applications should reach the director as soon as possible. Since **acceptance to the University does not guarantee admission to residence**, a separate application for on-campus housing must be sent to:

Director of Residences
Concordia University – Loyola Campus
Hingston Hall, Room: HA 156
7141 Sherbrooke Street West
Montréal, Québec, H4B 1R6
(514) 848-4755
(514) 848-4780 (fax)

OFF-CAMPUS HOUSING

A computerized housing list is available at CSU, Hall Building, Room: H 260, (514) 848-7476.

18.6 RECREATION AND ATHLETICS

Physical activity is an important component of student life and it provides many opportunities for individual growth and development. Recreation and Athletics offers a complete and diversified program in order to provide an opportunity for all students to participate in a physical activity of their choice. The principles of fair play and equality of opportunity guide all program activities. Fitness, recreational, and skill-development programs for men and women operate on both campuses under the supervision of professionally trained instructors. These activities provide a forum for physical fitness, structured participation, and low-intensity competition. The interuniversity sport program is primarily for students with playing experience and those who wish to pursue a high level of competition. Graduate as well as undergraduate students pursuing studies on a full-time basis, and meeting the requirements of the Canadian Interuniversity Athletic Union, are eligible to represent Concordia in interuniversity competition. Concordia University holds memberships in the CIAU, O-QIFC, QSSF, and the OUA. Although Concordia has fielded national championship teams, the focus of the interuniversity program continues to be the development of academic and athletic excellence. Towards this end, Recreation and Athletics offers a comprehensive academic athlete support program to all student-athletes involved in interuniversity teams.

The south campus is the focal point of all fitness, recreation, and sport activities on the Loyola Campus. This facility includes full-length playing fields and a fitness and recreation centre complete with an ice arena, gymnasium, and weight-training room. The Sir George Williams intramural and instructional programs are centred in the Victoria School gymnasium.

Loyola Campus
Athletics Complex, Room: PA 104
(514) 848-3850

Sir George Williams Campus
Victoria School, Room: GY 060
(514) 848-3860

Concordia Stinger Hot Line: (514) 848-3888

18.7 FINANCIAL AID AND AWARDS

General Information

The Financial Aid and Awards Office assists students and prospective students in seeking and securing financial assistance to enable them to pursue their scholastic objectives. Student financial assistance is available in various forms, such as government student loans and/or bursaries; University scholarships and bursary programs; on-campus work opportunities through the University Work Study Program; and corporate scholarship programs.

18.7.1
*Gouvernement
du Québec
Student Loans and
Bursaries*

Application forms for Québec Loans and Bursaries are available from the Financial Aid and Awards Office. Each student is responsible for completing his or her application form and forwarding it directly to the government. Once a student's aid is calculated, he or she will receive a *Détail de Calcul* sheet indicating the amount of aid he or she will be entitled to receive. It is important to note that the Loans and Bursaries Program is based on the principle that the student and in some cases, his or her parents, sponsor or spouse, must contribute toward the cost of the student's education according to their respective means. Financial assistance is initially granted in the form of a loan which a student must pay back at the end of his or her studies. If a student is entitled to more than the maximum loan, he or she may receive additional assistance in the form of a bursary, which does not have to be paid back.

Eligibility

Students are eligible to be considered for government assistance if they meet the following conditions: 1) Canadian Citizen or Permanent Resident; 2) domiciled and residing in Québec for one year [the last 12 consecutive months before pursuing full-time studies (excluding residents of other provinces who move to Québec to pursue their full-time studies)]; 3) must be enrolled full-time. Full-time credit load for undergraduate students is defined as at least 12 credits per term. For Graduate students (master's and PhD), status is defined by the Admissions Office of the School of Graduate Studies. Graduate students in a Certificate or Diploma program must be registered for a minimum of eight credits per term.

In addition, the student must not have received assistance for a period exceeding:

- a) Nine terms of university studies towards a single bachelor's degree;
- b) 11 terms of university studies towards a single bachelor's degree which required more than 90 credits (not applicable to Mature students);
- c) 13 terms of university studies towards a single bachelor's degree in a co-op program;
- d) Seven terms of university studies towards a master's level degree;
- e) Eight terms of university studies towards a master's level degree with thesis;
- f) 11 terms of university studies towards a doctorate degree.

The periods described above (a,b,c, and d) are not cumulative, but are independent of each other. A student may not receive assistance for more than 22 semesters of full-time study.

The Department of Aide financière aux études set the following maximum cumulative debt load starting 1997-98 academic year. Please be advised that the maximum cumulative debt load is unrelated to your eligibility periods, in other words, you might not be eligible for any assistance if you have accumulated a maximum debt load even if you have not used up all your eligibility periods.

<i>Level of study</i>	<i>Maximum limit of loans</i>
Secondary vocational school	\$ 21,000
College: general	\$ 15,000
technical	\$ 21,000
non-subsidized	\$ 25,000
University: undergraduate programs requiring less than eight terms (BA)	\$ 25,000
undergraduate programs requiring more than eight terms (co-op, engineering)	\$ 30,000
graduate: master's level	\$ 35,000
master's level with thesis	\$ 40,000
doctorate level	\$ 45,000

PHYSICALLY DISABLED STUDENTS

Students in any faculty, who are Canadian Citizens or Permanent Residents and who have been domiciled in Québec for one year prior to their full-time studies, may apply for a bursary if they suffer from a recognized major functional physical disability. Applications are available from the Financial Aid and Awards Office as well as at Services for Disabled Students. Further information is also available at Services for Disabled Students.

SUMMER LANGUAGE IMMERSION COURSE BURSARIES

Bursaries will be granted to students across Canada to enable them to enrol in a five-week immersion course in French or English at accredited institutions.

The aim of this program is to provide post-secondary students with the opportunity to learn one of Canada's official languages as their second official language and to improve their knowledge of the culture represented by that language. Candidates whose mother tongue is neither French nor English may not receive bursaries to study English or French as their first official language. These bursaries will defray the cost of tuition, instructional materials, and room and board, but will not cover transportation costs or pocket money.

Inquiries regarding the awarding of bursaries (e.g., eligibility, etc.) should be made to the students' provincial coordinator or territorial official, the names and addresses of which are available at the Financial Aid and Awards Office.

Eligibility:

Students are eligible if they meet the following conditions:

- a) are Canadian Citizens or Permanent Residents at the time of application. Students studying in Canada on visas are not eligible;
- b) have general post-secondary standing or can prove that they will have obtained such a status by the time they become involved in the program;
- c) were enrolled as full-time students during the previous academic year.

OFFICIAL LANGUAGE MONITOR PROGRAM

Monitors are students who help students with the spoken language by conveying to them the real-life aspect of the language. They carry out their duties under the supervision of second-language teachers.

Full-time monitors work for 10 months (September to June) for an average of 25 hours per week and may earn up to \$11,000. Part-time monitors are employed for eight months for an average of eight hours per week (September to April). The program also provides reimbursement for certain expenses. For further information contact the Financial Aid and Awards Office.

18.7.2
Federal and
Provincial Loans
and Bursaries

Students applying for Federal and Provincial Loans (other than Québec) must be Canadian Citizens or Permanent Residents with one year's residency, without pursuing full-time studies, and domiciled in the province to which they apply. When students apply for financial assistance from the government (Federal or Provincial), and certification of student status is required on the application form, this certification is obtained from the Financial Aid and Awards Office. In all provinces except Québec, the provincial authority listed below administers the Canada Student Loan Plan (Federal) as well as their own programs.

List of Appropriate Provincial Authorities

ALBERTA
Student Finance Board
6th Floor, Sterling Place
9940 - 106th Street
Edmonton, Alberta
T5J 1G7
(403) 427-2740

BRITISH COLUMBIA
Student Services Branch
Ministry of Advanced Education,
Training and Technology
2nd Floor, 1106 Cook Street
Victoria, British Columbia
V8V 3Z9
1-800-742-1818 (toll free)

MANITOBA
Student Aid Branch
Box 6, 693 Taylor Avenue
Winnipeg, Manitoba
R3M 3T9
(204) 945-6322

NEW BRUNSWICK
Department of Youth and Recreation
P.O. Box 6000
Fredericton, New Brunswick
E3B 5H1
1-800-667-8626 (toll free)
(506) 453-2577

NEWFOUNDLAND and LABRADOR
Student Aid Division
Department of Education
P.O. Box 8700
St. John's, Newfoundland
A1B 4J6
(709) 729-4235

NORTHWEST TERRITORIES
Department of Education,
Student Services Section
Yellowknife, Northwest Territories
X1A 2L9
(403) 873-7194

NOVA SCOTIA
Student Aid Office
P.O. Box 2290, Station M
Halifax, Nova Scotia
B3J 3C8
(902) 424-8420 (or 7737)

ONTARIO
Student Support Branch
Ministry of Colleges and Universities
P.O. Box 4500
189 Red River Road, 4th Floor
Thunder Bay, Ontario
P7B 6G9
(807) 343-7260
1-800-465-3013 (toll free in Ontario)
1-800-465-3958 (telephone device for the
hearing impaired)

PRINCE EDWARD ISLAND
Canada Student Loans Committee
Department of Education
P.O. Box 2000
Charlottetown, Prince Edward Island
C1A 7N8
(902) 892-3504

QUÉBEC
Ministère de l'Éducation
Direction générale de l'aide financière aux
étudiants
1035, rue de la Chevrotière
Québec, Québec
G1R 5A5
(418) 643-3750
(514) 864-4505 (for information or inquiry into
the status of your file)
(Interactive telephone 24 hours/day, 7 days/week)

SASKATCHEWAN
Saskatchewan Advanced Education and
Manpower
Student Financial Services
1855 Victoria Avenue
Regina, Saskatchewan
S4P 3V5
(306) 787-5620

YUKON
The Student Financial Assistance
Awards Committee
Superintendent of Education
P.O. Box 2703
Whitehorse, Yukon Territory
Y1A 2C6
(403) 667-5141

CANADA STUDENT LOAN
Department of the Secretary of State of Canada
Student Assistance Directorate
P.O. Box 2090, Station D
Ottawa, Ontario
K1P 6C6
(819) 994-1844

18.7.3
*Concordia University
Financial Aid*

Work Study Program

Work Study is a Financial Aid program funded by Concordia University. The program is designed to assist full-time students with education and living costs, when their own resources are determined to be insufficient, by working part-time at Concordia University during the school year. The intent of the program is to give students an opportunity for career or life-related experience while, at the same time, meeting a portion of their financial need. Students may work either or all of Summer, Fall, and Winter semesters for a maximum of 15 hours per calendar week. The hourly wage is set between \$7 and \$9.

Eligibility: A student is eligible for Work Study if he/she meets the following criteria:

- a) must be a Canadian Citizen, a Permanent Resident, or an International student;
- b) must be registered as a full-time student for the academic period in which the work is performed;
- c) must demonstrate financial need as evidenced by a needs test done by the Financial Aid and Awards Office.

Further information can be obtained at the Financial Aid and Awards Office, and by reading the *Work Study Information and Application* pamphlet available at the Financial Aid and Awards Office.

Tuition Deferrals

Students who have received a confirmation of financial assistance from a government funding source and who are unable to pay their tuition fees by the required deadlines may apply to defer payment until such time as they receive their funds. Requests for tuition deferrals must be made through the Financial Aid and Awards Office. Tuition deferrals will not cover any outstanding tuition fees from previous years nor the interest on the outstanding balance. For further information, please contact the Financial Aid and Awards Office.

Short-term Advances

Funds are available at the Financial Aid and Awards Office for students experiencing financial difficulties. Such advances are issued to undergraduate and graduate, full-time and part-time students at Concordia University. Students must see a Financial Aid and Awards officer for further information on eligibility requirements and conditions.

The service is made possible by contributions of the Concordia University Alumni Association Inc. to the University Emergency Loan Endowment Fund from which interest earnings support part of the Short-term Advance Program.

18.7.4
*Concordia University
Scholarships and
Bursaries*

Concordia University Awards

Two types of awards are available to undergraduate students through the Financial Aid and Awards Offices; these are scholarships and bursaries.

Entrance Scholarships are available to students entering university programs, and In-course Scholarships are available to students who have completed the previous year of full-time study at Concordia University. In all cases, scholarships are awarded on the basis of scholastic achievement and, for some awards, consideration is given to the involvement in university life.

Bursaries are available to students who have completed at least one semester of full-time study at Concordia University. These bursaries are known as In-course Bursaries, and are awarded on the basis of scholastic achievement and financial need.

Unless otherwise stated, all awards are granted to full-time students who are Canadian Citizens or Permanent Residents. Unless expressly authorized by the University Undergraduate Scholarships and Awards Committee, award recipients may hold only one of the following types of awards in a given academic year: Concordia Entrance Scholarships, Concordia In-course Scholarships, or Concordia In-course Bursaries.

For additional information and application forms, contact the Financial Aid and Awards Office or consult its *Financial Aid and Awards Office (FAAO) Handbook*.

CONCORDIA ENTRANCE SCHOLARSHIPS

A number of scholarships are available to students entering their first year of full-time study. These are awarded by the University Scholarship and Awards Committee on the basis of academic achievement during the first three semesters of cégep or equivalent. For a complete list, see §300.1 or consult the *FAAO Handbook*.

CONCORDIA IN-COURSE SCHOLARSHIPS

In-course Scholarships are awarded to full-time students (unless otherwise indicated) who have completed at least 24 credits at Concordia. Recipients are selected in the summer on the basis of the previous year's academic achievement. The scholarships are paid in the following Fall and Winter terms. Recipients must maintain their full-time status throughout the year the award is tenable. Unless otherwise indicated, no application is required. Academic performance is reviewed with the Office of the Registrar. For a complete list, see §300.2 or consult the *FAAO Handbook*.

CONCORDIA IN-COURSE BURSARIES

These awards are made on the basis of financial need and satisfactory academic standing. The value of each award may fluctuate yearly depending upon current interest rates.

Unless stated differently, awards are given to full-time students who are Canadian Citizens or Permanent Residents. For a complete list, see §300.2 or consult the *FAAO Handbook*.

Concordia Senior Student Bursary Program

Concordia University has, for many years, endeavoured to facilitate access to university studies for senior citizens. The University is happy to offer to eligible students who make the request, bursaries to help defray the cost of their studies. These bursaries are non-renewable, but recipients may apply in successive years.

Eligibility: Applicants must be 65 years of age or over, and registered as full- or part-time students at Concordia University. Applicants must be considered as either senior Independent, senior undergraduate, or senior graduate students.

Value of Bursaries: The value of these bursaries is \$25 per credit for each level of study.

Approval Process: Recipients will be selected on the basis of progress in their studies, and a personal statement indicating mention of their financial need and how this bursary would be of assistance to them.

For additional information, consult the *FAAO Handbook* available from the Financial Aid and Awards Office.

18.7.5 Awards Offered by External Organizations

These awards are sponsored and administered by external associations, companies, foundations, societies, and clubs. Applications go directly to the organization administering the award, unless otherwise noted. For a complete list, see §300.3.

18.7.6 International Students

American Students:

Students coming to a Canadian university from the United States may apply for a Higher Education Loan through their home state. These forms, once completed by the student, must be sent to Concordia's Financial Aid and Awards Office for further completion. Due to the lengthy processing time by the U.S. Government, it is recommended that students submit their application forms as soon as possible upon acceptance from the University.

Students from Other Countries:

The scholarships, bursaries, and loans offered through Concordia University and external agencies are generally not available to overseas students. Students studying on a student visa who require financial aid should, therefore, contact their home country's Department of Education.

The Canadian International Development Agency offers training assistance to most developing countries with which Canada has a cooperative agreement; however, students must be nominated by their own government. For further information, contact the Scholarship Committee, Human Resources Directorate, Canadian International Development Agency, 200 Promenade du Portage, Hull, Québec, K1A 0G4.

Students should try to obtain adequate finances before coming to Canada. If students do not plan to return home during the summer, four additional months of living expenses should also be provided for.



international students

19.1 *ADMISSION REQUIREMENTS*

- 19.1.1** Admission Requirements
- 19.1.2** Language Proficiency
- 19.1.3** Criteria for Admission
- 19.1.4** Application Fee
- 19.1.5** Registration

19.2 *IMMIGRATION PROCEDURES AND DOCUMENTATION REQUIRED FOR THE UNIVERSITY*

- 19.2.1** Immigration Procedures
- 19.2.2** Documentation Required for the University

19.3 *TUITION AND OTHER FEES FOR INTERNATIONAL STUDENTS*

19.4 *SCHOLARSHIPS, BURSARIES AND LOANS*

19.5 *INTERNATIONAL STUDENT HEALTH AND ACCIDENT INSURANCE*

19.6 *WORKING ON-CAMPUS*

19.7 *ESTIMATED COST OF LIVING FOR INTERNATIONAL STUDENTS*

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INTERNATIONAL STUDENTS

There are approximately 1,600 students from outside Canada studying at Concordia University. In this section, International students will find relevant information on admission requirements, immigration regulations and tuition fees.

The International Students Office, a member of the Advocacy and Support Services Group of Student Services, is responsible for providing programs and services which are responsive to, and supportive of the International students' special needs. The services include:

- orientation sessions;
- assistance for students with personal and academic difficulties;
- cultural integration/adaptation;
- health insurance plan;
- coordination of all campus and community services available to International students;
- assistance on immigration matters;
- emergency loans;
- letters for military deferment, transfer of funds, and immigration invitation/visitation letters;
- liaison with sponsoring agencies and governmental sponsors of students.

Upon arrival at Concordia University, students are encouraged to attend an Orientation Session organized by the International Students Office, in order to pick up their *Information Package* on Concordia and the City of Montréal. Students should attend an Insurance Information Session and sign up for a health insurance card or opt out of the health insurance plan. It is essential that International students bring copies of their immigration documents to the International Students Office.

19.1 ADMISSION REQUIREMENTS

19.1.1 Admission Requirements

Concordia welcomes applications for admission from well-qualified students from other countries. In general, students are expected to have completed the level of education required for university admission in their home country. The school-leaving subjects taken by the candidate should normally be appropriate for the degree program to which application has been made. Some programs have additional requirements, e.g. audition, interview, portfolio. Since entry to many programs is limited, the satisfaction of minimum requirements does not guarantee entry to the University. More specific information with respect to admission requirements and placement levels may be obtained by writing to the Office of the Registrar.

Depending on their educational background, applicants are considered for entry to three-year (90 credits) or four-year (120 credits) degree programs. In the case of the BEng, BA (Early Childhood and Elementary Education), BEd (TESL), or BFA (Specialization in Art Education), the program requires four to five years.

United Kingdom and Commonwealth

Passes awarded in the examinations for the General Certificate of Education, the Cambridge Overseas and Higher School Certificates, the West African School Certificates, General Certificate of Secondary Education, or the equivalent, will be considered as satisfying the general entrance requirements if the conditions of either Scheme A or Scheme B are satisfied.

Scheme A: Passes in five subjects, of which at least two must be passed at the Advanced Level (GCE) or Principal Level (COHSC), and three at the Ordinary Level (GCSE) or the School Certificate Level.

Scheme B: Passes in four subjects, of which at least three must be passed at the Advanced Level (GCE) or Principal Level (COHSC), and one at the Ordinary Level (GCSE) or the School Certificate Level.

Some additional information attached to the fulfilment of the above schemes:

- a) an average grade of "D" or better in Advanced or Principal Level subjects is normally expected. In the case of certain quota programs where enrolment is limited, candidates will have to present higher grades in order to compete successfully for places at the University;
- b) two appropriate AS (Advanced Supplementary) Levels may be accepted in lieu of an Advanced Level for the purposes of satisfying the general entrance requirements of the University.

Some programs have specific subject requirements. These have been outlined below. The following indicates, by degree, which Advanced or Principal Level subjects are required.

BAdmin, BComm, BSc — Mathematics and one other acceptable subject

BA, BEd, BFA — Any two acceptable subjects

BEng — Mathematics and Physics

BCompSc

Computer Applications — Mathematics and any other acceptable subject

Computer Systems — Mathematics and Physics

Information Systems — Mathematics and any other acceptable subject

Software Systems — Mathematics and Physics

Students who have not written Advanced or Principal Level examinations but who have good grades in at least five appropriate Ordinary Level, GCSE, or School Certificate Level subjects plus one year of formal schooling beyond Ordinary Level, in a suitable academic program in a recognized school or college, may be considered for admission to an undergraduate program requiring the completion of 120 credits (four years). In the case of the BEng, BA (Early Childhood and Elementary Education), BEd (TESL), and BFA (Specialization in Art Education), the program would require four to five years.

United States

High school graduates with good grades from accredited schools who have followed an academic program designed for university entrance may apply for admission to an undergraduate program requiring the completion of 120 credits (four years). In the case of the BEng, BA (Early Childhood and Elementary Education), BEd (TESL), and BFA (Specialization in Art Education), the program requires four to five years.

Applicants are required to have a better than average school record and high ranking in their graduating class. While no set pattern of courses in high school is required, all applicants are expected to have taken four units of English. Those applying for admission to Science or Engineering must include three or four units in mathematics and two in the sciences. At least three units of mathematics are recommended for admission to Commerce and Administration.

Although not required for admission, letters of recommendation from school guidance counsellors and the results of aptitude and achievement tests (SAT, ACT) are helpful additions to an application. Students who have passed Advanced Placement examinations in appropriate subjects with a grade of “3” or better may be granted some advanced standing.

France

Students who have completed the requirements for the Baccalauréat with satisfactory results may be considered for admission to an undergraduate program requiring the completion of 90 credits (three years), or 120 credits (four years) for the BEd (TESL), BA (Early Childhood and Elementary Education), and BFA (Specialization in Art Education).

The number of credits required for the BEng varies according to the option chosen and to the previous preparation of the student, but is usually no fewer than 115.

In cases where the Baccalauréat specialization (serie) followed does not fully satisfy the entrance course requirements for the degree program sought, the student, if admitted, will have to include the designated prerequisites as part of the first-year program. In some instances, the prerequisites must be taken in addition to the undergraduate program.

International Baccalaureate

IB Diploma candidates who achieve passes in six subjects with three at the Higher Level and who obtain a minimum total of 27 points may be considered for admission to the three-year (90 credits) programs of study (four years of study in Engineering, Early Childhood and Elementary Education, TESL, or BFA — Specialization in Art Education). Students who have not completed the full IB Diploma program but have IB Certificates in individual Higher Level subjects may be eligible for credit.

Other Countries

Candidates applying from other countries who have completed the level of education required for university admission in their home country will be considered for admission provided that better than average grades have been attained. In most cases, a specific minimum overall standard is required. More specific information with respect to admission requirements and placement levels may be obtained by writing to the Office of the Registrar.

Transfers from Post-Secondary Institutions

Transfers from post-secondary institutions are referred to §13.3.4.

The language of instruction at Concordia University is English. For information regarding the language proficiency requirement, refer to §13.4.

19.1.3 <i>Criteria for Admission</i>	Admission to Concordia University is selective and will be considered when all relevant academic documents and the Summary of Educational Experience form have been received. All certificates must show the actual grade obtained in each examination. International applications are processed by the Office of the Registrar. Further information and assistance may be obtained from the Office of the Registrar; telephone (514) 848-2668; fax (514) 848-2621; E-mail: admreg@alcor.concordia.ca.
19.1.4 <i>Application Fee</i>	International applicants must pay a \$50 (Canadian) application fee payable by international money order or draft drawn on a Canadian bank in Canadian funds to Concordia University
19.1.5 <i>Registration</i>	Students select courses for the September and January terms prior to the start of classes. Most students within North America will register for their courses by touchtone telephone using CARL, the Concordia Automated Response Line. Alternate registration arrangements will be available for students residing outside North America. Complete information regarding registration is sent with the letter of acceptance.

19.2 IMMIGRATION PROCEDURES AND DOCUMENTATION REQUIRED FOR THE UNIVERSITY

19.2.1 <i>Immigration Procedures</i>	<p>All persons, other than Canadian Citizens and Landed Immigrants, who wish to pursue their studies in the province of Québec, must obtain a <i>Québec Certificate of Acceptance</i> (CAQ) and a <i>Canada Student Authorization</i>. The CAQ is obtained by the Québec Immigration authorities and the <i>Student Authorization</i> by the Visa Departments of the Canadian Consulates and Embassies. Under the <i>Canada Immigration Act</i>, it is illegal to study in an institution of higher education without a valid <i>Student Authorization</i>.</p> <p>The obtainment of the CAQ and <i>Student Authorization</i> is a lengthy process; it is therefore strongly recommended that the application process be started immediately upon receipt of the letter of admission from Concordia University.</p> <p>When applying for the <i>Québec Certificate of Acceptance</i> and the <i>Student Authorization</i>, International students are required to present evidence of sufficient funds for tuition and living expenses. Evidence of financial support may be:</p> <ul style="list-style-type: none"> • an updated bank book with proof of ownership, and if necessary, documents attesting to other sources of income; • a sworn declaration of financial support, accompanied by proof of sufficient funds from the Canadian or foreign sponsor for the current year, if applicable; • if students are under 18 years of age, both Québec Immigration and Canada Immigration require that the student provide legal proof of sponsors here in Canada; • an authorization to transfer funds from the organization which controls currency in the student's country, if applicable; • a bursary attestation or confirmation of a financial award, specifying the monthly or annual amount, if applicable. <p>Students are advised to ensure that they will have sufficient funding to complete their degree. Concordia University cannot assume financial responsibility for students who do not have adequate funds.</p> <p>Processing fees will be charged by both Québec Immigration and Canada Immigration for the issuance of a <i>Québec Certificate of Acceptance</i> and a <i>Student Authorization</i>.</p>
19.2.2 <i>Documentation Required for the University</i>	<p>International students are required to provide a copy of their CAQ and <i>Student Authorization</i> to the International Students Office, 1455 de Maisonneuve Blvd West, Hall Building, Room 653 when they first register at Concordia and thereafter every time they renew their immigration documents. This directive is in accordance with the funding regulations of the Québec Ministry of Education which requires that all International students registered at a university in Québec have in their permanent file a copy of their <i>Québec Certificate of Acceptance</i> and their <i>Student Authorization</i>. International students are required to provide a copy of their CAQ and <i>Student Authorization</i> to the International Students Office before the DNE deadline of their first semester at Concordia. Failure to comply to this regulation could result in the cancellation of the student's registration.</p>

19.3 TUITION AND OTHER FEES FOR INTERNATIONAL STUDENTS

International students with *Student Authorizations* must maintain a full-time status, i.e. 24 credits or more per year. The fees, payable to the University for the regular session of two terms commencing in September and concluding in April, are approximately \$11,265 for a full-time student. This amount includes tuition fees for 30 credits; student service and association fees; registration fees; and the health insurance premium. This estimate does not include the cost of textbooks or living expenses. Please refer to §15.2 for information concerning the payment of tuition and fees.

Exemptions from Differential Fees

Certain International students may be eligible to pay the same fees as Québec Residents. Students who qualify for an exemption from the differential fees for International students, pay the regular fee of \$2,933 (including tuition and compulsory fees for 30 credits, and the International students health insurance fee). The following are among those exempted from paying differential fees:

1. diplomats, consular personnel, accredited representatives or civil servants of a foreign country, the United Nations or one of its organizations, an intergovernmental organization to which Canada belongs, and any member of the staff of the above-listed persons who are working in Canada in an official capacity and who have obtained an attestation issued by "le Protocole" (Gouvernement du Québec), 525 René-Lévesque East, Québec City, telephone (418) 649-2346. This attestation is valid for one academic year and must be renewed each year the student attends university;
2. the spouse and unmarried children of the above-listed persons;
3. an International student whose spouse or parents hold certain work categories of work permits in Québec. For further details and verification, please contact the Office of the Registrar, Room LB 700, (514) 848-2624;
4. a student who is registered at a university and who has come to Québec as an exchange student, or as a student participating in a program of cooperation agreed to by the Government of Québec and which exempts the participants from paying differential fees;
5. a student who is a French Citizen (accord France-Québec);
6. a student who is admitted to a Québec university and whose country has a fee remission agreement with the Québec Government. The Government of Québec has agreements for granting a **limited** number of exemptions from the differential fees for International students from the following countries:

Algeria, Argentina, Belgium (some members of the Communauté française de Belgique), Benin, Bolivia, Burkina Faso, Burundi, Cameroon, Catalonia, Central African Republic, Chad, China, Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Djibouti, Ecuador, Egypt, Gabon, Germany (a certain number of holders of *Deutscher Akademischer Austauschdienst* scholarships [DAAD]), Guinea, Haiti, Honduras, Iran, Israel, Kenya, Korea, Lebanon, Madagascar, Mali, Mauritania, Mauritius, Mexico, Morocco, Panama, Peru, Rwanda, Senegal, Togo, Tunisia, Uruguay, and Vietnam.

Inquiries and applications for an exemption should be made directly to the student's own Ministry of Education prior to leaving their home country. In some cases, when the person is in Canada, it may be possible to apply for an exemption at their Embassy or Consulate in Canada or in the United States;

7. a student who is registered at a university and whose status as a Permanent Resident has been officially recognized by Canada Immigration. Should a student receive Permanent Resident status during the academic year, he or she should immediately present the official document to the Office of the Registrar, Room LB 700, to have his or her status changed and to inquire about a possible refund. For more information on refund policies and deadlines for submission of documents, please contact the Office of the Registrar;
8. under certain conditions, students who have obtained official Convention Refugee status may be eligible for an exemption from differential fees for International students, only if proof of Convention Refugee status is supported by one of the following additional documents. If they have a CSQ (Certificat de sélection du Québec), they may be eligible to pay the Québec tuition rate. If they have a letter from Immigration Canada stating that they have applied for permanent residency status, they may be eligible to pay the non-Québec ("Canadian") tuition rate. Should a student receive Convention Refugee status during the academic year, he or she should immediately present the official document(s) indicated above to the Office of the Registrar, Room LB 700, to have his or her status changed and to inquire about a possible refund. For more information on refund policies and deadlines for submission of documents, please contact the Office of the Registrar;
9. program-based exemption: a student who is registered on a full-time basis in one of the French programs listed below may be eligible to pay Québec fees for all of their courses, subject to certain conditions.
 - Specialization: Études françaises;
 - Major: Études françaises (Option: Langue ou Littératures de langue française);
 - Major: Études françaises (Option: Langue et didactique).

course-based exemption: students who are not in a Major or Specialization listed above may be eligible for an exemption from the differential fees for approved courses in French Literature, French Language, and Québec Studies on a course basis. Students in privatized programs, however, are not eligible under this category and must pay the privatized rate for all their courses. This includes International students in programs in Arts and Science and in Commerce and Administration.

Specific information on the category of fee exemption (partial or full exemption from differential fees) will be provided with the acceptance letter to one of these programs.

19.4 SCHOLARSHIPS, BURSARIES AND LOANS

Scholarships, bursaries, and loans offered through Concordia University and external agencies are generally not available to International students. Students should try to obtain adequate finances before coming to Canada and ensure that they will have sufficient funding to complete their degrees.

Concordia In-Course Bursaries

These awards are made on the basis of financial need and high academic standing. Among the available in-course bursaries, those financed by Concordia University are available to International students. Applications are available at the Financial Aid and Awards Office in November and should be returned in December. For more information, contact the Financial Aid and Awards Office and consult §18.7.4; for a complete listing, consult §300.7.

Concordia Shuffle Entrance Scholarships

A number of entrance scholarships are awarded to students entering their first year of study. The recipients will be selected on the basis of academic achievement during the first three semesters of cégep or equivalent. Application forms are available from the Financial Aid and Awards Office. Deadline: August 1.

CIDA Award Programs

The Canadian International Development Agency (CIDA) offers training assistance to most developing countries with which Canada has a cooperative agreement. Students are nominated by their own government. For further information, contact the Scholarship Committee, Human Resources Directorate, CIDA, 200 Promenade du Portage, Hull, Québec, K1A 0G4.

Canadian Commonwealth Scholarship and Fellowship Plan

A number of scholarships are awarded to citizens of a Commonwealth country other than Canada. First-degree programs are permissible where these are not available in the home country. Application forms can be obtained from the International Council for Canadian Studies, 325 Dalhousie, S-800, Ottawa, Ontario, K1N 7G2.

Exemption from Higher Tuition Fees

The Government of Québec has agreements for granting a **limited** number of exemptions from differential fees for International students from specific countries. Consult §19.3.6 for the list of countries and information.

Other Awards

Information on awards to International students and trainees is also available in the brochure *Awards for Study in Canada* published by the Canadian Bureau for International Education. For further information, write to CBIE, 220 Laurier Avenue West, Suite 1100, Ottawa, Ontario, Canada, K1P 5Z9.

American Students

Students coming to Concordia University from the United States may apply for a Higher Education Loan Plan through their hometown bank. These forms must be sent to the Financial Aid and Awards Office at Concordia for completion. It is essential that applications be made as early as possible.

Emergency Loans

Funds are available at the International Students Office for short-term emergency loans. Loans are issued to full-time undergraduate and graduate students who need temporary emergency financial assistance. For further information on eligibility requirements and conditions, contact the coordinator, International Students Office, Room: H 653, (514) 848-3514.

19.5 INTERNATIONAL STUDENT HEALTH AND ACCIDENT INSURANCE

Québec Immigration Services and the Québec Ministry of Education require that all International students be covered by a health insurance plan while studying and living in Québec. To this end, Concordia University has implemented a compulsory health and accident insurance plan for its International students. Health insurance fees are charged automatically every year when International students register for courses.

The single coverage for the 2001-02 academic year is \$475 (subject to change). Coverage is from August 15, 2001, until August 14, 2002. Students who register in January pay a pro-rated premium for the eight-month period ending August 14, 2002.

International students who have diplomatic status, an adequate health plan, a Medicare card, or other valid reasons, may be eligible for an exemption from the Concordia Health Insurance Plan for International Students. Proof of insurance will be required in order to process an exemption; it must be presented in English or French indicating the period and amount of coverage available in Canada. This information is required by the Québec Ministry of Education and must be in the students' Concordia file for audits and reports.

Applications for exemptions are processed in person at the International Students Office (ISO), Hall Building, Room H 653. Applications must be processed every year before the prescribed deadlines. Applications submitted after the deadlines and approved by the ISO will be charged an administration fee.

Refunds will be considered only for students who have not filed any claim to the Insurance Company during the current insured period. Refunds are given in a form of credit to the student's university account.

Exemption Deadlines for Students Beginning the 2001-02 Academic Year in September 2001

First deadline: October 31, 2001

Full refund

Second deadline: Last day of exams for the Fall Term — December 21, 2001

Refund of \$375

(administration fee: \$100)

Final deadline: Last day of exams for the Winter Term — May 5, 2002

Refund of \$275

(administration fee: \$200)

No refund will be approved after this final deadline.

Exemption Deadlines for Students Beginning the 2001-02 Academic Year in January 2002

First deadline: February 28, 2002

Full refund

Final deadline: Last day of exams for the Winter Term — May 5, 2002

Refund of \$295

(administration fee: \$100)

No refund will be approved after this final deadline.

Exemption Deadline for Students Beginning in Summer 2002

Final deadline: June 15, 2002

Full refund

No refund will be approved after this final deadline.

19.6 WORKING ON-CAMPUS

Immigration regulations allow full-time International students to accept employment on the campus of the educational institution where they are registered, as long as they hold a valid *Student Authorization*. They do not require an *Employment Authorization*. After graduation, International students may work in Canada, provided the employment is in their field of study. In this case, they must apply for an *Employment Authorization* within 60 days of release of final marks.

Spouses of International students are allowed to work on- and off-campus and are required to apply for an *Employment Authorization*. However, spouses who are full-time students are restricted to on-campus employment only. Further information may be obtained at the International Students Office, (514) 848-3515, E-mail: iso@alcor.concordia.ca.

19.7 ESTIMATED COST OF LIVING FOR INTERNATIONAL STUDENTS

University Fees*

Tuition	\$ 8,268.30 – 9,999.90
Compulsory Fees:	
Administrative Fee	270.00
Student Service Fee	272.70
Student Association Fee**	166.50
Health Insurance	475.00
Miscellaneous Fees:	
(New Student) Orientation Fee	35.00
Registration Fee	40.00
Capital Campaign Fee	60.00
Safety Patrol	2.00
Le Frigo-Vert	3.40

Personal Expenses***

Books and Supplies	1,176.00
Lodging	4,800.00
Groceries	3,000.00
Transportation	600.00
Clothing	650.00
Miscellaneous	1,800.00

*The University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of an academic term.

**Fee may vary depending on the Faculty but will not exceed \$166.50.

***General and personal expenses listed are estimates and are subject to personal needs.

NOTE: The figures stated above are in Canadian funds. Tuition fees are based on 30 credits. General and personal expenses are estimated for full-time students for 12 months. Fees are subject to change without notice.

NOTE: Students who qualify for an exemption from the differential fee for International students pay the regular fee of \$2,933 (which includes tuition and compulsory fees for 30 credits, and the International students health insurance fee). Refer to §19.3 for Exemptions from Differential Fees.



student and alumni associations

20.1 *UNDERGRADUATE STUDENTS*

20.2 *GRADUATE STUDENTS*

20.3 *ALUMNI*

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STUDENT AND ALUMNI ASSOCIATIONS

20.1 UNDERGRADUATE STUDENTS

The **Concordia Student Union (CSU)** represents most undergraduate students, both full-time and part-time. Besides organizing many events and activities, CSU ensures student representation on University decision-making bodies, both those that legislate on academic and administrative matters and those concerned with the cultural and social life of the community. There are student members of the Board of Governors, Senate, the Faculty Councils, and the Concordia Council on Student Life, which is directly concerned with the provision of student services.

Powers and responsibilities are divided between three bodies: the Executive, the Council of Representatives, and the Judicial Board. The Executive is headed by an elected president. The Council of Representatives consists of students elected from the four Faculties and Independent students. The Judicial Board is an appointed body charged with assuring the constitutionality of any new legislation.

Students in two Faculties are also represented by their own associations: the **Commerce and Administration Students' Association (CASA)** and the **Engineering and Computer Science Students' Association (ECA)**.

The CSU has more than 75 member-clubs and associations. They may be associated with a department or discipline, such as the Psychology Students' Association or pursue a special interest like the Debating Society. Each has its own program of activities, funded by the CSU. There are numerous clubs and associations for students of particular ethnic backgrounds under the Office of the Dean of Students.

Other activities that come under the CSU umbrella are the television station *CUTV*, the radio station *CJLO*, and the CSU Orientation. Two student newspapers, *The Link* and *The Concordian*, operate independently of the student association. Both newspapers are incorporated, with separate, wholly autonomous Boards of Directors.

There is a CSU office on each campus. The Sir George Williams office is in Room H 637 of the Henry F. Hall Building. The Loyola office is in the Loyola Campus Centre. CSU's telephone number is (514) 848-7474.

20.2 GRADUATE STUDENTS

Graduate students become members of the Graduate Students' Association (GSA). It is concerned with graduate student representation on the Board of Governors, Senate, the School of Graduate Studies and Faculty Councils, and initiates a wide range of activities for graduate students and the University community as a whole, including social occasions, lectures, and concerts. The Association publishes a regular newsletter. Its offices are at 2030 Mackay Street (514) 848-7900.

20.3 ALUMNI

The **Concordia University Alumni Association (CUAA)** was created in 1983. In the words of its Constitution, the Association exists to "encourage the fellowship of graduates from Loyola, Sir George Williams, and Concordia University through social, educational and cultural activities" and to "preserve and promote the interests of Concordia University through alumni involvement in its future and governance". All graduates of the University are automatically lifetime members of the Association, as are graduates of Concordia's two founding institutions: Loyola College and Sir George Williams University.

The Concordia University Alumni Association works with Concordia's Office of University Advancement and Alumni Relations to provide alumni with a variety of programs and services. The Association organizes a series of career and personal development seminars and workshops, and a travel program; all are outlined in the *Calendar of Events* mailed to Montréal-area graduates. All graduates receive the quarterly *Concordia University Magazine*.

Alumni are encouraged to purchase an Alumni Gold Card. This identification card allows graduates to take advantage of University library borrowing privileges and access to audio-visual services, Concordia's sports medicine clinic, counselling and development, legal services, and Concordia's daycare centre. Cardholders pay no registration fees for courses at Concordia's Centre for Continuing Education and receive discounts for Stingers varsity sports games, car rentals, fitness club memberships, local theatre, subscriptions to popular magazines, and recreation and fitness

facilities. Alumni may benefit from the Concordia University affinity credit card; home, automobile and life insurance reduced rates; long distance telephone, wireless phone and Internet services; and moving, emergency auto repair, hotel and travel services.

The CUAA organizes programs and events year-round. Homecoming offers graduates an opportunity to visit, participate in special reunions and seminars, and enjoy campus tours, entertainment, and the Homecoming football game. The Annual Alumni Recognition Awards Banquet honours outstanding volunteer contributions of alumni, faculty, students and friends of the University. The Concordia Alumni Student Team (C*A*S*T) connects prospective students, current students, alumni and the University. The online Mentor Program and Business Card Exchange gives current students the opportunity to draw upon the vast experience of Concordia alumni. The Alumni Office also has a convocation photography service and offers E-mail Forwarding for Life to all its graduates.

The Concordia University Alumni Association is committed to the development and support of a worldwide network of alumni chapters. Representing more than 100,000 graduates, there are active alumni groups in Ottawa, Toronto, Calgary, Edmonton, Vancouver, Victoria, New York, Boston, San Francisco, Los Angeles, London, Trinidad & Tobago, and Hong Kong. The Correspondence Program can help alumni find lost friends or classmates.

For more information please contact the Office of University Advancement and Alumni Relations, 1250 Guy Street, Room FB 520, (514) 848-4856 or fax (514) 848-2826, E-mail alumni@coral.concordia.ca, or visit the CUAA at <http://alumni.concordia.ca/AlumWeb>.



centre for continuing education

21.1 COMMUNICATIONS/VISUAL ARTS

21.2 BUSINESS AND ADMINISTRATION

21.3 CONTINUING EDUCATION COMPUTER INSTITUTE

21.4 CONTINUING EDUCATION LANGUAGE INSTITUTE

21.5 GENERAL SEMINARS AND WORKSHOPS

21.6 HOSPITALITY MANAGEMENT AND TOURISM

21.7 INSTITUTE IN MANAGEMENT AND COMMUNITY DEVELOPMENT

s e c t i o n

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Director
MURRAY SANG
(514) 848-3601

Academic Coordinator, Language Institute
RIVA HEFT
(514) 848-3610

*Assistant Director, and Administrator of
Business and Administration Programs and
Computer Institute*
JOHN DICKSON
(514) 848-3603

*Administrator of the Institute in Management
and Community Development*
LANCE EVOY
(514) 848-3956

*Administrator of Visual Arts/Communications;
Hospitality Management and Tourism*
SANDRA ROZANSKY
(514) 848-3605

*Coordinator of the Summer Program of the
Institute in Management and Community
Development*
MIREILLE LANDRY
(514) 848-3956

Administrator of the Language Institute
MAUREEN R. HABIB
(514) 848-3607

Location

Sir George Williams Campus
1600 St. Catherine St. West, 1st floor
(514) 848-3600

As part of its commitment to the lifelong pursuit of education, Concordia University, through its Centre for Continuing Education, offers a variety of non-credit educational programs for adults. These are designed to meet the practical needs and interests of people in the workplace, helping them to refine and improve their skills. Students may choose individual courses or a program series to earn Certificates in a particular area. The Centre's courses and programs do not count towards any of the degree or Certificate programs offered by the Faculties of the University. The Centre for Continuing Education calendar provides a description of the available courses and programs as well as the Centre's regulations pertaining to admission, tuition, and academic concerns.

21.1 COMMUNICATIONS/VISUAL ARTS

Communications

Graphics: This Certificate program introduces students to both the theory and practice of graphics in visual communications. These hands-on courses focus on developing students' understanding of typography using the principles of good design. A Certificate in Graphics is awarded upon successful completion of 10 courses.

Graphic Applications in Desktop Publishing (Day only): This Certificate program is intended for students interested in acquiring the software skills sought after in today's competitive graphic design world. Students will learn the fundamentals of sound graphic design and will learn how to apply their acquired software skills to render graphic design that successfully responds to the client requirements. A Certificate in Graphic Applications in Desktop Publishing is awarded upon successful completion of six courses.

Journalism: This Certificate program focuses on developing and enhancing information-gathering and writing skills. Students interested in pursuing careers in freelance, news media or magazine writing will benefit from these practical courses. A Certificate in Journalism is awarded upon successful completion of 10 courses.

Photography: This Certificate program consists of five-week and ten-week modules on a rotating schedule, featuring regular assignments with critiquing and evaluation. A Certificate in Photography is awarded upon successful completion of seven courses.

Photo/Video Imaging (Day only): This Certificate program is designed to help students create their own distinctive photographic style. Students will be able to create artistic works through photography and computer digital illustrations. Through theory, practice and experimentation, students will create dynamic visual landscapes as well as other photographic images. A Certificate is awarded upon successful completion of seven courses.

Public Relations (Day or Evening): This Certificate program offers practical courses to students interested in exploring the underlying concepts and techniques of public relations in a variety of areas: government, media, community, and corporate relations. A Certificate in Public Relations is awarded upon successful completion of 10 courses.

Radio Production: This Certificate program takes you behind the scenes with courses in audio production. Students wishing to pursue careers on the technical side of the radio industry will benefit from this blend of theory and practice. A Certificate in Radio Production is awarded upon successful completion of 10 courses.

Technical Communication: This Certificate program has been developed in response to the enormous demand for technical communicators in Canada and covers a range of areas, such as technical writing and translation, technical editing, and project management. A Certificate in Technical Communication is awarded upon successful completion of 10 courses.

Communications (Day only): The Communications Certificate takes a broad approach to the study of media and communications. The aim is to develop the student's appreciation of the role played by the mass media in society. Students will be prepared for a wide range of career opportunities in the media industries, in public relations and in government. Topics include News and Feature Writing, Basic Editing, Writing for Radio and TV, Effective Speaking, Technical Writing, Graphic Design Techniques, Video Production I, and Fundamentals of Public Relations. A Certificate is awarded upon successful completion of 10 courses.

Video Production: This Certificate program takes students behind the scenes with courses in video production. Students will acquire the different techniques needed to produce a video, such as scripting, storyboarding, and directing. Those wishing to pursue careers on the technical side of the media industry will benefit from this blend of theory and practice.

Visual Arts

The following courses are offered as interest courses only: Drawing, Watercolour, Life Drawing, and Portraiture. There are no exams, and no certificate is awarded.

21.2 BUSINESS AND ADMINISTRATION

Human Resources Management (Day or Evening): This program provides comprehensive education in basic current human resources management techniques. To qualify, candidates must complete a total of 10 courses.

International Trade (Day or Evening): This series of courses is offered to people who wish to expand their knowledge in importing and exporting. Each course concentrates on one important aspect of international business. Ten courses are required for the completion of a Certificate. An intensive eight-week day program is also available.

Management (Day or Evening): This series of courses in management and administrative subjects is for people who wish to expand their knowledge in selected business fields. Each course concentrates on one important area of business activity. A Certificate is awarded upon the completion of 10 courses.

Marketing (Day or Evening): This series of courses is offered to people who wish to expand their knowledge in the selected area of marketing. Each course concentrates on a specific area and helps the "marketing manager" develop the necessary tools and knowledge to be effective in the marketing process.

To qualify for a Certificate in Marketing, candidates must successfully complete a total of 10 courses, six compulsory and any four elective courses offered in this program. An intensive eight-week day program is also available.

Purchasing and Inventory Control: This program is designed for those who wish to expand their expertise in buying and materials management. A Certificate in Purchasing and Inventory Control is awarded upon successful completion of 10 courses.

Small Business Management: Designed as a "how to" guide for the entrepreneur, this program offers essential information and advice for assuming the risk of a business or enterprise. To qualify for the Certificate in Small Business Management, candidates must successfully complete a total of 10 courses — six compulsory and any four elective courses offered in the Small Business Management program.

Interest courses: The Business and Administration section also offers single courses not included in any program. These include Trading in Options and Stocks; Stocks, Bonds and Other Investments; and Trading in Commodity Futures.

21.3 CONTINUING EDUCATION COMPUTER INSTITUTE

Computer Aided Design (CAD): This 200-hour hands-on Certificate program is offered to individuals wishing to complement or improve their competitiveness in engineering, product design, or any field where design and technical drawing are essential. The PC-based software taught in this Certificate is AutoCAD®. Chosen for its flexibility in building models and prototypes and its ability to produce both simple and complex viewpoints, AutoCAD® is a leading industry standard.

Mechanical Computer Aided Design (MCAD): This 320-hour Certificate is designed to develop advanced professional skills and techniques required in the industry of Mechanical Computer Aided Design. Instruction is based on the AutoDesk Mechanical Desktop® software that is recognized as an international industry standard. Students will start with two-dimensional design fundamentals and progress to three-dimensional design using solids, surface and wireframe modelling. Students will complete their training utilizing the more complex capabilities of parametric modelling, associative assembly modelling, two-dimensional associative design and drafting, and three-dimensional surface and wireframe modelling. Project work is an integral part of all MCAD courses. Students will be required to maintain a printed portfolio of their course work. This portfolio can also provide potential industry employers with a means of evaluating graduates of the MCAD Certificate program.

Electronic Office Systems Technology: This practical Certificate program allows individuals to gain the skills needed to succeed in today's business environment. The program has a hands-on approach to learning how to use the computerized office tools found in all sectors of the workforce. Included in the Certificate are courses in today's most popular word processing, spreadsheet, presentation, database, accounting and communication application software.

Information Systems Management: This 10-course Certificate program is intended to complement a student's current academic training with a solid overview of the use of computer hardware and software in business, as well as the current techniques and practices needed to properly manage and maintain business information. The Certificate provides students with a sound knowledge and understanding of the concepts required within a Management Information Systems (MIS) environment.

Software Development for Business Applications: This Certificate program is intended for students who wish to acquire a solid background in business programming principles and practices. The program provides students with the standard software development tools still prevalent in today's business programming environment. Industry standards such as QBasic, COBOL, C, and C++ programming languages, as well as database design and applications, are included in this Certificate.

Software Development for Visual Applications: Ideal for students with sound structured programming techniques under their belt, this Certificate program will deal with the new wave of object-oriented programming principles and practices. The program provides students with the opportunity to learn and work with the most up-to-date visual software development tools, and acquire the skills, which are increasingly in demand in today's visual applications programming environment. Languages such as OO/C++, VisualBasic, Visual C++ as well as database interfacing can be mastered through this hands-on Certificate program.

Software Development for the World Wide Web: Designed for students with structured programming techniques in hand, who are looking to develop integrated Internet commerce applications. This program will explore the practical side of software development for the Internet from introductory business promotion applications to more complex database interfacing techniques. This Certificate offers the possibility of using some of the newest software development tools and languages. The skills acquired through these courses match those being sought in the Web page design market of today. Tools such as HTML, DHTML, Java/J++, Unix, Internet scripting languages, as well as database interfacing for e-commerce can be mastered through this practical Certificate program.

Electronic Office Systems Technology (Intensive Day): Students can save time and money with this eight-week intensive hands-on Certificate program for those interested in acquiring the skills needed to succeed in today's business environment. Less expensive than the part-time evening Certificate, this intensive day Certificate allows students to gain the hands-on computer skills that can be easily applied to any business environment in any sector of the workforce. In eight short weeks, students will master the PC-based software application tools that today's employers are seeking, including Microsoft Windows, Word, Excel, PowerPoint, and Access, as well as Computerized Accounting and Internet navigation and E-mail.

Computer Applications Programming (Intensive Day): The Computer Institute has successfully offered this intensive 44-week Certificate program since 1984. This program has been maintained, updated, and designed for individuals who require practical training in today's fast-moving business computer environment. The Computer Applications Programming Certificate provides the best possible PC and mainframe hands-on business programming and database analysis training in the shortest time possible. Students will be exposed to a range of operating systems, programming languages, and software applications including Web page creation. Students successfully completing this Certificate will have the Junior Programmer/Analyst skills required to join this dynamic and competitive workforce.

21.4 CONTINUING EDUCATION LANGUAGE INSTITUTE

English Language Programs

The *Intensive Program* (240 hours/8 levels) is primarily designed to prepare students to enter English-language universities or colleges; however, professionals or business people who require a high level of competency equally benefit from it. A Certificate of Proficiency is awarded upon successful completion (75%) of the Advanced 2 level.

Students who successfully complete the Advanced 2 level, with a final grade of 70%, and who wish to continue their full-time studies at Concordia University, will automatically meet the English language proficiency requirements for admission.

The *Conversation Program* (40 hours/8 levels) is designed to help students improve their speaking and listening skills for social or work-related purposes. A Certificate of Proficiency is awarded upon successful completion of Level 8.

The *Writing Workshop Program* (40 hours/5 levels) is designed to help students improve their writing skills and master the foundations of good writing from short writing tasks to reports. A Certificate of Proficiency is awarded upon successful completion of Level 5.

The Language Institute also offers special courses: Interactive English Grammar, as well as courses to assist students to prepare to write English-language proficiency tests (all are 40 hours).

French Language Programs

The *French Language Program* allows students to register in one of its six levels, according to their proficiency. The program is offered in the morning, the evening, and Saturdays (40 hours). It is designed to give students the tools and practice they need in French to encourage and develop their linguistic abilities in their professional and social environment. A Certificate of Proficiency is awarded upon successful completion of Level 6.

In addition, special courses in written French are available to qualified students (40 hours).

Spanish Language Programs

The *Spanish Language Program* allows students to register in one of its five levels, according to their proficiency. The program is offered in the afternoon, evening, and Saturdays (40 hours). It is designed to give students the tools and practice they need in Spanish to encourage and develop their linguistic abilities in their professional and social environment. A Certificate of Proficiency will be awarded upon completion of Advanced Spanish.

Special language courses in English, French, and Spanish can be created to suit the needs of individual groups. Interested parties should contact the Institute for further information.

21.5 GENERAL SEMINARS AND WORKSHOPS

The Computer Institute and the Business and Administration Section regularly offer practical seminars and workshops to professionals, business personnel, and others who wish to enrich their computer and business knowledge and skills. The seminars and workshops are provided either in the Centre's own well-equipped facilities or at other seminar and business locations.

For information on these workshops, contact the Centre for Continuing Education.

21.6 HOSPITALITY MANAGEMENT AND TOURISM

Hospitality Management (Day or Evening): This program provides training in the special skills required to manage hotels, restaurants, and institutional and commissary food-service establishments. Students must successfully complete 10 courses to obtain the Certificate in Hospitality Management.

Tourism (Day or Evening): The Tourism program trains people for work in travel agencies, airlines, travel departments and other enterprises within the tourism industry. The courses are valuable to

those beginning a career in tourism as well as to experienced travel agency employees interested in upgrading their skills. An intensive eight-week day program is also available. Candidates must successfully complete 10 courses to obtain the Certificate in Tourism.

21.7 INSTITUTE IN MANAGEMENT AND COMMUNITY DEVELOPMENT

The Institute in Management and Community Development provides training opportunities to assist those in the voluntary non-profit sector in renewing and developing skills in managing community-based organizations; developing new skills in fundraising for social change; and training new leadership.

Each summer, the Institute offers a week of training, national and international in scope, which is open to all and examines community-related issues such as: Community Economic Development, Building Community Involvement and Leadership, Affordable Housing Alternatives, Art and Community Development, and Running Effective Community-Based Organizations.

Summer training sessions are taught by practitioners who excel in the field.

For more information, contact Lance Evoy or Mireille Landry, 7141 Sherbrooke Street West, Room: CC 326, Montréal, Québec, H4B 1R6, (514)848-3956 or fax (514) 848-4598.



open and distance learning

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OPEN AND DISTANCE LEARNING (ODL)

Location

1455 de Maisonneuve Blvd West, Room: H 339
Montréal, Québec H3G 1M8
Telephone: (514) 848-3440
Fax: (514) 848-3441
E-Mail: odl@alcor.concordia.ca
Web Address: <http://odl-iits.concordia.ca/open>

Concordia University is committed to a long tradition of providing quality instruction and learning in forms readily accessible to all. A part of this commitment is providing students flexibility and access through the use of various technologies such as telecourses, online Web delivery, computer-mediated communication, and computer and video conferencing. Several credit courses are offered at a distance. It is important to keep in mind that these courses are as rigorous and rewarding as those given on campus.

AHSC 241	Recreation and Leisure in Contemporary Society, 3 credits
AHSC 281	Introduction to Therapeutic Recreation, 3 credits
ANTH 202	Introduction to Culture, 3 credits
COMM 499F	Personal Finance, 3 credits
EDUC 210	Psychology of Education, 6 credits
EDUC 305	Technology for Educational Change, 3 credits
FINA 695P	Personal Finance (Graduate course)
INTE 296	Discover Statistics, 3 credits

More information about these courses is available on ODL's Web site at <http://odl-iits.concordia.ca/open> or in the sections of the respective departments.

Additional online courses may be offered in 2001-02. Up-to-date information can be found at <http://odl-iits.concordia.ca/open/online/online.htm>.



teacher training and certification

23.1 INTRODUCTION

23.2 ELIGIBILITY/ADMISSIONS REQUIREMENTS

23.3 APPLICATION FORMS

23.4 CITIZENSHIP REQUIREMENTS

23.5 ASSISTANCE

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TEACHER TRAINING AND CERTIFICATION

Teacher Training and Certification:

Mailing Address:
Office of the Provost and Vice-Rector, Research
Concordia University
1455 de Maisonneuve Blvd West
Bishop Court, Room 223
Montréal, Québec H3G 1M8
(514) 848-4865/4868

23.1 INTRODUCTION

The Ministry of Education of Québec (MEQ) certifies teachers for the primary and secondary schools of the province, following completion of an approved 120-credit program. The MEQ recognizes Concordia University as a centre for teacher training. Concordia offers three MEQ-approved programs that grant teaching licences (*brevets d'enseignement*). Because Concordia University has chosen not to organize its teacher training programs into a single faculty, the programs are listed under different faculties and departments. Students interested in pursuing teacher training and certification are asked to consult with the appropriate faculties and academic departments for further information. These are:

Faculty of Arts and Science

1. Department of Education (See §31.090)
Bachelor of Arts (BA), Specialization in Early Childhood and Elementary Education (120 credits)
2. Teaching of English as a Second Language (See §31.320)
Bachelor of Education (BEd), Specialization in Teaching English as a Second Language (120 credits)

Faculty of Fine Arts

1. Department of Art Education/Art Therapy (See §81.40)
Bachelor of Fine Arts (BFA), Specialization in Art Education (120 credits)

Concordia offers other Certificate and Diploma programs that may be of interest to students and teachers. Please refer to the Undergraduate Calendar for the Certificate programs, and the School of Graduate Studies Calendar for the Diploma programs.

23.2 ELIGIBILITY/ADMISSIONS REQUIREMENTS

It is important to review the admissions regulations (see §13.3) and residency requirements (see §16.1.3) for eligibility in the MEQ-approved programs.

23.3 APPLICATION FORMS

Forms to apply for teacher certification are available from the Office of the Registrar. In addition to the application form available from the Office of the Registrar, a separate department application form is also required for the BA Specialization in Early Childhood and Elementary Education only. The application form can be obtained from the Department of Education. Forms are also available from the School of Graduate Studies for Diploma programs.

23.4 CITIZENSHIP REQUIREMENTS

Permanent teacher certification in Québec is only available for Canadian Citizens. Students who have Landed Immigrant status or who hold an appropriate work permit at the time of their graduation may be eligible for a temporary licence to teach. Although students with a visa can complete teacher training programs at Concordia University and receive a university degree, they are not eligible for certification by the Ministry of Education of Québec.

23.5 ASSISTANCE

Graduates of Concordia University with certification problems should contact:

Direction de la formation et de la titularisation du personnel scolaire

Ministère de l'Éducation

1035, rue de la Chevrotière, 28^e étage

Québec (Québec) G1R 5A5

Telephone: (418) 643-2948 Fax: (418) 643-2149



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24 INSTITUTE FOR CO-OPERATIVE EDUCATION

Principal

GRAHAM MARTIN, Associate Professor

Vice Principal

JOHN FISET

Fellows and Program Directors

ARSHAD AHMAD, Lecturer, Finance (Director, Finance Co-op)

MERAL BÜYÜKKURT, Associate Professor, Decision Sciences and Management Information Systems (Director, Management Information Systems Co-op)

MARTHE J. CATRY-VERRON, Adjunct Associate Professor, Études françaises (Director, French Translation Co-op)

DAVID CHEEKE, Professor, Physics (Director, Physics Co-op)

GERARD J. GOUW, Associate Professor, Mechanical Engineering (Director, Mechanical and Industrial Engineering Co-op)

RAJAGOPALAN JAYAKUMAR, Associate Professor, Computer Science (Director, Computer Science Co-op)

MARCUS F. LAWRENCE, Associate Professor, Chemistry and Biochemistry (Director, Chemistry and Biochemistry Co-op)

SANDRA M. ROBINSON, Lecturer, Accountancy (Director, Accountancy Co-op)

BALBIR S. SAHNI, Associate Professor, Economics (Director, Economics Co-op)
BARBARA SHAPIRO, Lecturer, Management (Director, Human Resource Management Co-op)

HAROLD J. SIMPKIN, Lecturer, Marketing (Director, Marketing Co-op)

MANFRED E. SZABO, Professor, Mathematics and Statistics (Director, Mathematics and Statistics Co-op)

CHRISTOPHER W. TRUEMAN, Associate Professor, Electrical and Computer Engineering (Director, Electrical and Computer Engineering Co-op)

RADU G. ZMEUREANU, Professor, School for Building (Director, Building and Civil Engineering Co-op)

The University through the Institute for Co-operative Education offers programs in the co-operative format in the Departments of Chemistry and Biochemistry, Economics, French Translation, Mathematics and Statistics, and Physics in the Faculty of Arts and Science; in all Departments of Engineering and the Department of Computer Science in the Faculty of Engineering and Computer Science; and in the Departments of Accountancy, Finance, Decision Sciences and Management Information Systems, Human Resource Management, and Marketing in the Faculty of Commerce and Administration. As it becomes feasible, the University may consider offering other disciplines in the co-op format.

The Co-op Philosophy

Co-operative education is an educational process in which Academic Study terms are alternated with Work terms in the public and private sectors. Students obtain practical on-the-job experience in their academic discipline while continuing their studies towards a degree. It is a system that integrates the interests of employers, educators, and students.

Advantages of a Co-op Education

Integrating theory and practice in a structured and purposeful manner allows the student to come to terms with the realities of professional practice in a way that allows for the development of self-confidence, self-reliance, and self-motivation. From the Work terms, students learn to accept responsibility and the importance of deadlines. Realistic career expectations may be more easily formed. In the Institute, besides technical knowledge and practical experience, students gain skills in interpersonal relations through participation in seminars, workshops, talks, and social activities.

Employers benefit as well. The employer who agrees to cooperate with the Institute benefits from the opportunity to evaluate prospective personnel without making permanent employment commitments and from the availability of students on a year-round basis. In recruiting permanent employees, they have available to them trained graduates with work experience who can be productive with little or no training period.

The collaboration between employers and faculty is mutually beneficial, providing an opportunity for employers to contribute to, and influence, the educational process, and for the faculty to become aware of latest developments in industry. In some cases joint industry-university research projects result.

Admission to Co-op

Admission to co-op is selective based on academic performance, as well as other factors such as extracurricular activities, communication skills, motivation, personality, and drive. Applicants must be legally eligible to work in the public and private sectors.

Students applying should so indicate by filling the appropriate box on the University Admissions form. After acceptance by the University, selected applicants will normally be interviewed by the appropriate co-op committee. Applicants may be asked to provide a résumé of past work experience and a statement of the reasons for their interest in the co-op format.

Students accepted to the program will be assigned a co-op adviser from within their academic department. It should be noted that, in the Faculty of Arts and Science, only Honours and Specialization programs are offered in the co-op format.

Co-op Fee

Students should note that a co-op fee was instituted to cover in part the administrative costs particular to the co-op program. This fee is currently \$185 per term and is charged for the second to penultimate terms inclusive. Students requiring less than the normal number of terms to complete their programs in the co-op format are subject to the same total fee as those requiring the normal number of terms.

Co-op fees are due one month before the first day of eligible terms and are not refundable after the first day of the second month of the term, i.e., February 1, June 1 and October 1.

Co-op Performance Requirements

Students permitted to undertake their studies in the co-op format enrol as regular undergraduates in their program and are subject to its academic regulations. However, higher performance standards are often required to continue in the co-op format.

Students undertaking the co-op format in a program offered by the Faculty of Arts and Science are normally required to maintain a GPA of 2.50, and normally with no grade lower than a "D" in any course, elective or required. Students registered in Honours programs must meet the Faculty Honours program academic requirements.

Students registered in the co-op programs in the Faculty of Engineering and Computer Science are normally required to maintain an overall GPA of 2.70 with no single term below 2.50.

Students registered in the co-op programs in the Faculty of Commerce and Administration are normally required to maintain an annual GPA of 2.70 or better and no failing grades.

The evaluation of each of the required Work terms will be based on the submission of a work-term report by the student and the evaluation of the student's performance by the employer. The student must successfully complete both components to pass the Work Term which is marked on a pass/fail basis. The work-term reports are not considered for degree credits.

Failure to meet the co-op academic requirements or failure to complete a Work Term will normally result in the withdrawal of the student from the Institute for Co-operative Education.

Work Term

Co-operative education at Concordia is not to be construed as a placement operation or an inexpensive labour apprenticeship. The Work Term is an essential part of the student's learning experience and there is to be equitable remuneration paid for work performed. The University is responsible for negotiating Work terms with employers who provide job descriptions to the Institute for Co-operative Education. The procedures for matching students to employers are managed by the Institute. Students must be willing to work anywhere in Canada, and may go abroad for a Work Term. A co-op coordinator or participating faculty member visits the students at their place of work to evaluate the work performance, gauge the learning opportunities, assess the compatibility of student and employer and, if necessary, take corrective action. **It should be noted that the University does not guarantee every student a job.**

UNDERGRADUATE PROGRAMS

Co-op programs offered in the **Faculty of Arts and Science**:

Chemistry and Biochemistry Co-op

Director: Dr. Marcus F. Lawrence, (514) 848-3374

The Chemistry and Biochemistry co-operative program is offered to students who are enrolled in the BSc Honours or Specialization in Chemistry, Biochemistry, Analytical Chemistry.

Students in Chemistry and Biochemistry co-op take the regular academic program; however, in the Work terms the employment opportunities range among a wide variety of industrial and government agencies located throughout Canada. Students are encouraged to choose their work-term positions in a way which provides them with experience ranging from basic analysis in industrial processes and environmental control to senior research placements in the laboratories of various employers. For specific details concerning the curriculum please see §31.050.

Economics Co-op

Director: Dr. Balbir S. Sahni, (514) 848-3902

The Economics co-operative program enables students to complete a BA Honours or Specialization in Economics. The academic content of the Economics co-op program is identical to the regular program; however, the required Work terms provide the co-op student with the unique opportunity of experiencing economics in an applied format.

Because of the course choices available, an Economics co-op student is prepared to undertake employment during his or her Work terms in a variety of public sectors including Provincial and federal government agencies. Private sector positions might include placements in banks, consulting firms, or planning departments in a variety of industries. For specific details concerning the curriculum please see §31.080.

French Translation Co-op

Director: Marthe J. Catry-Verron, (514) 848-7518

The Translation co-operative program enables students to complete a specialized BA in Translation. The Translation co-op program is identical to the regular program; however, the required Work terms provide the co-op students with the unique opportunity to apply their translation skills in the government and corporate sectors. Work opportunities are found in environments such as government ministries, communication departments, and various organizations such as technical publishers, consultants, advertising agencies, and similar. For specific details concerning the curriculum please see §31.110.

Mathematics and Statistics Co-op

Director: Dr. Manfred E. Szabo, (514) 848-3251

The Mathematics and Statistics co-operative program allows students to complete the BA or BSc degrees with Honours or Specialization in Mathematics, Applied Mathematics, Statistics, or Actuarial Mathematics. The academic content of the Mathematics and Statistics co-op programs is identical to the regular programs.

Work terms provide co-op students with the opportunity to gain practical experience with a variety of employers, such as insurance companies, consulting firms, large Canadian corporations, government departments, and research establishments. For specific details concerning the curriculum please see §31.200.

Physics Co-op

Director: Dr. David Cheeke, (514) 848-3292

The Physics co-operative program is available to students in the BSc Honours and Specialization in Physics. The academic content is very similar to the regular programs, with some specific recommendations for courses to improve the student's job skills. Students must be prepared to work in all parts of Canada. For specific details concerning the curriculum please see §31.230.

Co-op programs offered in the **Faculty of Commerce and Administration:**

Accountancy Co-op

Director: Sandra M. Robinson, (514) 848-2748

The Accountancy co-operative program is available to students who are enrolled in the BComm program and are majoring in Accountancy. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montréal area, students must be prepared to work in other parts of Canada. For specific details concerning the curriculum please see §61.40.

Finance Co-op

Director: Arshad Ahmad, (514) 848-2928

The Finance co-operative program is available to students who are enrolled in the BComm program and are majoring in Finance. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. Most of the positions will be in the Montréal area, however, students must be prepared to work in other parts of Canada. For specific details concerning the curriculum please see §61.70.

Human Resource Management Co-op

Director: Barbara Shapiro, (514) 848-2780

The Human Resource Management co-operative program is available to students who are enrolled in the BComm program and are majoring in Human Resource Management. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montréal area, students must be prepared to work in other parts of Canada. For specific details concerning the curriculum please see §61.90.

Management Information Systems Co-op

Director: Dr. Meral Büyükkurt, (514) 848-2741

The Management Information Systems co-operative program is available to students who are enrolled in the BComm program and are majoring in Management Information Systems. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montréal area, students must be prepared to work in other parts of Canada. For specific details concerning the curriculum please see §61.40.

Marketing Co-op

Director: Harold J. Simpkin, (514) 848-2955

The Marketing co-operative program is available to students who are enrolled in the BComm program and are majoring in Marketing. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. The program is new and while it is hoped that most of the positions will be in the Montréal area, students must be prepared to work in other parts of Canada. For specific details concerning the curriculum please see §61.100.

Co-op programs offered in the **Faculty of Engineering and Computer Science:**

Building and Civil Engineering Co-op

Director: Dr. Radu G. Zmeureanu, (514) 848-3203

The Building and Civil Engineering programs are offered in the co-op format to selected students pursuing undergraduate studies leading to the degree of BEng. The academic content of the co-op program is identical to the regular program but requires one additional course per term. Work-term opportunities range from a variety of industrial, government, and consulting organizations in and out of town. Students are encouraged to choose placement in both public and private sectors, and to mix office experience with site work. Please refer to §71.10.8 and 71.50 for specific information on program and performance requirements.

Electrical and Computer Engineering Co-op

Director: Dr. Christopher W. Trueman, (514) 848-3094

The Electrical and Computer Engineering programs are offered in the co-op format to selected students pursuing undergraduate studies leading to the degree of BEng. The academic content of the co-op program is identical to the regular program but requires one additional course per term. Work-term opportunities range from a variety of industrial, government, and consulting organizations in and out of town. Students are encouraged to choose placement in both public and private sectors, and to mix office experience with site work. Please refer to §71.10.8 and 71.50 for specific information on program and performance requirements.

Mechanical and Industrial Engineering Co-op

Director: Dr. Gerard J. Gouw, (514) 848-4197

The Mechanical and Industrial Engineering programs are offered in the co-op format to selected students pursuing undergraduate studies leading to the degree of BEng. The academic content of the co-op program is identical to the regular program but requires one additional course per term. Work-term opportunities range from a variety of industrial, government, and consulting organizations in and out of town. Students are encouraged to choose placement in both public and private sectors, and to mix office experience with site work. Please refer to §71.10.8 and 71.40 for specific information on program and performance requirements.

Software Engineering Co-op

Director: Dr. Rajagopalan Jayakumar, (514) 848-3011

Commencing in September 1998, the Computer Science Department offers a co-operative program in Software Engineering. This is a four-year program which will lead to professional engineering

qualifications in Software Engineering. The academic content is a mix of Computer Science and Engineering courses and is similar to that of the regular programs. For further details please see §71.70.

Computer Science Co-op

Director: Dr. Rajagopalan Jayakumar, (514) 848-3011

All options in the Computer Science program are offered in the co-op format to selected students enrolled in the BCompSc program. Co-op students in Computer Science take the regular academic program; however, they have the opportunity through the Work terms to experience computer science in the government and corporate sectors. As students near the end of their studies, they are able to choose placements directly related to their option, i.e. information systems, software systems, or systems architecture. Please refer to §71.10.8 and 71.70 for specific information on program and performance requirements.

CO-OP SCHEDULE

Activity **flow-chart** for students undertaking their programs in the co-op format except for the Engineering and the French Translation Co-ops:

YEAR	FALL Sept.-Dec.	WINTER Jan.-April	SUMMER May-Aug.
1	1 st Campus Term	2 nd Campus Term	Work Term I
2	3 rd Campus Term	Work Term II	4 th Campus Term
3	Work Term III	5 th Campus Term	Work Term IV
4	6 th Campus Term		

Activity **flow-chart** for students undertaking the Engineering Co-op Programs:

YEAR	FALL Sept.-Dec.	WINTER Jan.-April	SUMMER May-Aug.
1	1 st Campus Term	2 nd Campus Term	3 rd Campus Term
2	Work Term I	4 th Campus Term	Work Term II
3	5 th Campus Term	Work Term III	Work Term IV
4	6 th Campus Term	7 th Campus Term	

NOTE 1: The above activity flow-chart is for students admitted into the co-op format in the Fall Term of the first year of their academic program. However, students may be admitted at the start of its Winter Term, following their September entry, with special permission. All are required to register as full-time students, and they must plan their studies to give a reasonable division of the total credits required for their degree between the specified number of Campus terms. Students eligible to apply for NSERC grants should note that they must take at least 15 credits per term to be considered.

NOTE 2: The Work Term negotiated with the employer is for a minimum of fourteen weeks. Extension beyond this period, to a maximum of seventeen weeks, is at the sole discretion of the employer. To complete the requirements of each Work Term, a student's work-term report must be assessed as "pass" in accordance with the procedure specified under "Co-op Performance Requirements".

CONTACTS AT THE INSTITUTE

Principal
Prof. Graham Martin
(514) 848-3951

Vice Principal and Coordinator for Chemistry and Biochemistry and Physics Co-op programs
Mr. John Fiset
(514) 848-3952

Coordinators
Ms. Eve Pankovitch
Engineering Co-op programs
(514) 848-3953

Mr. Craig Brown
Computer Science, Management Information Systems, and Software Engineering Co-op programs
(514) 848-3978

Ms. Louise Lalonde
Accountancy and Marketing Co-op programs
(514) 848-3954

Ms. Allison Leblovic
Economics, Finance, and Human Resource Management Co-op programs
(514) 848-3944

Ms. Brigitte St. Laurent-Taddeo
Mathematics and Statistics, and French Translation Co-op programs
(514) 848-3958

Co-op Program Administrator
Ms. Lynn Bergeron
(514) 848-3975



convocation medals and prizes

25.1 GOVERNOR GENERAL'S AWARD

25.2 UNIVERSITY AWARDS

25.3 FACULTY AWARDS

25.3.1 Faculty of Arts and Science

25.3.2 John Molson School of Business

25.3.3 Faculty of Engineering and Computer Science

25.3.4 Faculty of Fine Arts

25.4 SPECIAL AWARDS

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CONVOCATION MEDALS AND PRIZES

25.1 GOVERNOR GENERAL'S AWARD

The Governor General's Silver Medal: Presented by her Excellency, the Governor General of Canada, and awarded to the highest ranking undergraduate student graduating from Concordia University.

25.2 UNIVERSITY AWARDS

The Birks Medal: Presented by Henry Birks & Sons (Montréal) Ltd., and awarded to the highest ranking student graduating with a BA degree.

The Anne Stokes Medal: Awarded to the highest ranking student graduating with a BEd degree in Teaching of English as a Second Language.

The Mappin Medal: Presented by the Mappin Family, and awarded to the highest ranking student graduating with a BSc degree.

The Administration Medal: Awarded to the highest ranking student graduating with a BAdmin degree.

The Charles E. Frosst Medal: Presented by Merck-Frosst Canada Inc., and awarded to the highest ranking student graduating with a BComm degree.

The Computer Science Medal: Awarded to the highest ranking student graduating with a BCompSc degree.

The Chait Medal: Awarded to the highest ranking student graduating with a BEng degree.

The Alfred Pinsky Medal: Awarded to the most outstanding student graduating with a BFA degree.

25.3 FACULTY AWARDS

The prizes listed in this section are awarded to the most outstanding graduating student in a department (or unit). Candidates are nominated by the departments or units for consideration and approved by the appropriate Faculty Council and Senate. The departments or units in making their selection may include, in addition to a high grade point average, other criteria such as number and/or level of the courses taken, outstanding results on a project or essay, or a significant contribution to the extra-curricular life of the department.

25.3.1 Faculty of Arts and Science

The Robert C. Rae Book Prize in Human Relations
The Biology Prize
The Chemistry Medal
The Classics Book Prize
The John E. O'Brien, s.j. Medal for Communication Studies
The Economics Prize
The Education Book Prize
The Medal for English
Le prix Paul d'Hollander pour les Études françaises
The Exercise Science Plaque
The Bogdan Zaborski Medal in Geography
The André Deland Medal for Geology
The Martin Lewis Memorial Book Prize in History
The Interdisciplinary Studies Medal
The Gordon Fisher Prize for Journalism
The Leisure Sciences Medal
The Liberal Arts College Prize
The Library Studies Plaque
The Lonergan University College Prize
The Eric O'Connor Mathematics Medal

The Modern Languages and Linguistics Plaque
 The W.R. Fraser Medal for Philosophy
 The Walter Raudorf Medal for Physics
 The Renée Vautelet Prize for Political Science
 The J.W. Bridges Medal for Psychology
 The Boyd Sinyard Prize for Religion
 The Vince Sirois Prize (School of Community and Public Affairs)
 The Science College Prize
 The Everett C. Hughes Medal for Sociology and Anthropology
 The Theological Studies Medal
 The Thérèse F. Casgrain Medal for Women's Studies

25.3.2 <i>John Molson</i> <i>School of Business</i>	The Ross Medal for Accountancy The Decision Sciences and Management Information Systems Medal The Finance Medal The International Business Medal The Management Medal The Marketing Medal
25.3.3 <i>Faculty of Engineering and Computer Science</i>	The Building Engineering Medal The Matthew Douglass Medal for Civil Engineering The Computer Engineering Medal The Phoivos Ziogas Medal for Electrical Engineering The Jaan Saber Medal for Industrial Engineering The Mechanical Engineering Medal
25.3.4 <i>Faculty of Fine Arts</i>	The Art Education Prize The Art History Prize The Cinema Prize The Contemporary Dance Prize The Design Art Prize The Interdisciplinary Studies Prize The Mel Hoppenheim Prize The Music Prize The Painting and Drawing Prize The Print Media and Photography Prize The Sculpture, Ceramics and Fibres Prize The Studio Art Prize The Theatre Prize

25.4 Special Awards (Awards are made only when merited)

The Concordia Medal: Presented by the Concordia University Alumni Association to an undergraduate graduating student who has displayed distinctive leadership ability through both academic and non-academic achievements and has won the outstanding commendation of his/her fellows and of the faculty.

The First Graduating Class Award: Presented on behalf of the first graduating class of the Faculty of Arts, Science and Commerce of Sir George Williams College, known as the Guinea Pig Club, for the most innovative and new contribution either academic or extra-curricular to University life.

The Malone Medal: Presented in honour of Rev. Patrick G. Malone, s.j., and awarded to the undergraduate graduating student whose efforts and dedication best exemplify the values of the University within the *internal* Concordia community.

The O'Brien Medal: Presented in honour of Dr. J.W. O'Brien and awarded to the undergraduate graduating student whose efforts and dedication best exemplify the values of the University within the larger *external* community.



faculty of arts and science

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|--------|---|--------|---|
| 31.001 | <i>FACULTY OF ARTS AND SCIENCE</i> | 31.190 | <i>LIBRARY STUDIES</i> |
| 31.002 | <i>PROGRAMS AND ADMISSION REQUIREMENTS</i> | 31.200 | <i>MATHEMATICS AND STATISTICS</i> |
| 31.003 | <i>DEGREE REQUIREMENTS</i> | 31.220 | <i>PHILOSOPHY</i> |
| | <i>ADULT EDUCATION (See 31.090.1)</i> | 31.230 | <i>PHYSICS</i> |
| 31.010 | <i>APPLIED HUMAN SCIENCES</i> | 31.240 | <i>POLITICAL SCIENCE</i> |
| 31.030 | <i>BIOLOGY</i> | 31.250 | <i>PSYCHOLOGY</i> |
| 31.050 | <i>CHEMISTRY AND BIOCHEMISTRY</i> | 31.270 | <i>RELIGION</i> |
| 31.060 | <i>CLASSICS, MODERN LANGUAGES AND LINGUISTICS</i> | 31.300 | <i>SCIENCE AND HUMAN AFFAIRS</i> |
| 31.070 | <i>COMMUNICATION STUDIES</i> | 31.310 | <i>SOCIOLOGY AND ANTHROPOLOGY</i> |
| 31.080 | <i>ECONOMICS</i> | | <i>SOUTHERN ASIA STUDIES (See 31.170)</i> |
| 31.090 | <i>EDUCATION</i> | 31.320 | <i>TEACHING OF ENGLISH AS A SECOND LANGUAGE</i> |
| 31.100 | <i>ENGLISH</i> | 31.330 | <i>THEOLOGICAL STUDIES</i> |
| | <i>ENGLISH AS A SECOND LANGUAGE (See 31.320)</i> | 31.340 | <i>URBAN STUDIES</i> |
| 31.110 | <i>ÉTUDES FRANÇAISES</i> | | <i>WOMEN'S STUDIES (See 31.560)</i> |
| 31.120 | <i>EXERCISE SCIENCE</i> | 31.400 | <i>COMPUTER SCIENCE (Minor)</i> |
| 31.130 | <i>GEOGRAPHY</i> | 31.500 | <i>COLLEGES, INSTITUTES AND SCHOOLS</i> |
| 31.140 | <i>GEOLOGY</i> | 31.515 | <i>CO-OPERATIVE EDUCATION</i> |
| 31.160 | <i>HISTORY</i> | 31.520 | <i>LIBERAL ARTS COLLEGE</i> |
| | <i>INFORMATION STUDIES (See 31.090)</i> | 31.530 | <i>LONERGAN UNIVERSITY COLLEGE</i> |
| | <i>INTERDISCIPLINARY CLUSTERS (See 31.170)</i> | 31.540 | <i>SCHOOL OF COMMUNITY AND PUBLIC AFFAIRS</i> |
| 31.170 | <i>INTERDISCIPLINARY STUDIES</i> | 31.550 | <i>SCIENCE COLLEGE</i> |
| 31.180 | <i>JOURNALISM</i> | 31.560 | <i>SIMONE DE BEAUVOIR INSTITUTE</i> |
| | <i>LEISURE SCIENCES (See 31.010)</i> | | <i>and WOMEN'S STUDIES</i> |

s e c t i o n

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31.001 FACULTY OF ARTS AND SCIENCE

Dean
MARTIN SINGER

Vice-Dean, Curriculum and Appraisals
ROBERT D. KILGOUR

Vice-Dean, Planning
ROBERT M. ROY

Vice-Dean, Student Affairs
FRANCES SHAVER

Vice-Dean, Administrative Affairs
WILLIAM KNITTER

Vice-Dean, Research and International Relations
JOHN A. CAPOBIANCO

<i>Location</i>	<i>Loyola Campus</i> Administration Building, Room: AD 229 (514) 848-2080	<i>Sir George Williams Campus</i> Library Building, Room: LB 689 (514) 848-2080		
<i>Structure</i>	<p>The Faculty of Arts and Science, comprised of the former Loyola Faculty of Arts and Science, the former Sir George Williams Faculty of Arts, and the former Sir George Williams Faculty of Science, was brought into being on July 1, 1977.</p> <p>For administrative purposes, the Faculty consists of departments, programs, Centres, Colleges, Institutes, and Schools.</p> <p>The Departments and other units of which the Faculty is comprised are as follows:</p> <table><tr><td><i>Departments</i> Applied Human Sciences Biology Chemistry and Biochemistry Classics, Modern Languages and Linguistics Communication Studies Economics Education English Études françaises Exercise Science Geography History Journalism Mathematics and Statistics Philosophy Physics Political Science Psychology Religion Sociology and Anthropology Theological Studies</td><td><i>Centre</i> Teaching of English as a Second Language <i>Colleges</i> Liberal Arts College Loneragan University College School of Community and Public Affairs Science College Simone de Beauvoir Institute <i>Programs</i> Geology Individually Structured Program Information Studies Science and Human Affairs Southern Asia Studies Urban Studies Women's Studies</td></tr></table>		<i>Departments</i> Applied Human Sciences Biology Chemistry and Biochemistry Classics, Modern Languages and Linguistics Communication Studies Economics Education English Études françaises Exercise Science Geography History Journalism Mathematics and Statistics Philosophy Physics Political Science Psychology Religion Sociology and Anthropology Theological Studies	<i>Centre</i> Teaching of English as a Second Language <i>Colleges</i> Liberal Arts College Loneragan University College School of Community and Public Affairs Science College Simone de Beauvoir Institute <i>Programs</i> Geology Individually Structured Program Information Studies Science and Human Affairs Southern Asia Studies Urban Studies Women's Studies
<i>Departments</i> Applied Human Sciences Biology Chemistry and Biochemistry Classics, Modern Languages and Linguistics Communication Studies Economics Education English Études françaises Exercise Science Geography History Journalism Mathematics and Statistics Philosophy Physics Political Science Psychology Religion Sociology and Anthropology Theological Studies	<i>Centre</i> Teaching of English as a Second Language <i>Colleges</i> Liberal Arts College Loneragan University College School of Community and Public Affairs Science College Simone de Beauvoir Institute <i>Programs</i> Geology Individually Structured Program Information Studies Science and Human Affairs Southern Asia Studies Urban Studies Women's Studies			
<i>Objectives</i>	<p>The Faculty of Arts and Science is committed to responsible and innovative leadership in developing and disseminating knowledge and values and encouraging constructive social criticism. The Faculty achieves these objectives through inclusive and accessible academic programs which stress a broad based, interdisciplinary approach to learning. We are dedicated to superior teaching and research supported by excellence in scholarship and creative activity, and a tradition of service to the community. The Faculty of Arts and Science serves many interdependent academic communities in an urban environment where students and faculty can pursue their shared commitment to lifelong learning.</p>			

General Studies in Arts and Science

The Faculty of Arts and Science encourages all students to explore beyond the boundaries of their programs of concentration. This is facilitated by the program structure and graduation requirements of the undergraduate degrees (see §31.002 and 31.003).

Undergraduate degrees normally require 90 credits of course work, consisting of at least one program of concentration (Major, at 36 to 48 credits; Specialization or Honours, at 60 or more credits).

The balance of the degree requirements may be made up of one or more Minors (24 to 30 credits), one or more clusters (15 or 18 credits), or by courses selected from a broad spectrum of disciplines. Students are required to complete at least 24 credits outside the main area of concentration. Most Major programs are relatively short, allowing maximal development of interests outside the area of concentration. Two areas of concentration can be combined in a Double Major. Even longer programs (Specialization and Honours) allow students to diversify their studies for up to one third of their degree requirements.

Program structures thus permit students to obtain a judicious balance between concentrated study and exploration of broader interests. Department and Faculty advisers are available to help students develop a plan of study which accommodates their personal interests and satisfies degree requirements.

Programs of concentration and related Minors are published in the Calendar entries for each of the disciplines in the Faculty (§31.010 onward). To facilitate innovative exploration outside these standard disciplines, the Faculty offers many alternatives. First, the University has established five Colleges (§31.500 onward) which foster various philosophies and methods of education on an intimate scale. Second, it has created Majors which cross disciplinary boundaries (Science and Human Affairs, Southern Asia Studies, Urban Studies, and Women's Studies). In addition, selected students may create their own Individually Structured Program (§31.170) under the direction of the Faculty adviser. Finally, the Faculty offers cross-disciplinary Minors (for example, Science and Human Affairs, Southern Asia Studies, Urban Studies, and Women's Studies) and a number of Interdisciplinary courses (§31.170) which may be chosen as electives in any program.

A good general education — balancing the development of expert knowledge in a narrow domain with broader academic experience — can be obtained in the Faculty of Arts and Science. The programs outlined are best considered as models of what can be planned by imaginative students and their academic advisers.

31.002 PROGRAMS AND ADMISSION REQUIREMENTS

General admission requirements are listed in §13.

Specific requirements for admission to the various programs leading to the BA, BEd, and BSc degrees, and to Certificates, are set out in the first column of the following listings. They refer to the table of cégep pre-Arts and pre-Science profiles defined below. Students lacking one or more of these prerequisites may be admitted, but must include the designated prerequisites among the first 30 credits of their undergraduate program. In certain cases, the prerequisites must be taken in addition to the undergraduate program.

Profile	Requirements
0.00	Diploma of Collegial Studies (DEC — Diplôme d'études collégiales)
0.72	DEC or equivalent and appropriate teaching licence.
0.80	Full-time teaching position with an educational institution recognized by the Ministry of Education of Québec (MEQ) and a Provisional Teaching Authorization from the MEQ.
3.14	Biology 301, 401, 911 or 921
4.03	New Social Science DEC Mathematics 300 Biology 921
4.10	DEC in Humanities or equivalent. Any other DEC including courses in Psychology and Quantitative Methods or its equivalent.
5.00	Natural Science DEC
6.00	<i>DEC intégré en sciences, lettres et arts</i>
10.1	Mathematics 337; or 103, 307 Biology 301 or 401 or 911 or 921 Psychology 101 or 102
10.5	Two cégep courses or equivalent in the language to be studied. If these courses have not been available in the cégep attended, the student may be required to complete them at the university-level.
10.9	Mathematics 103, 203 Physics 101, 201, 301 Chemistry 101, 201 Biology 301
10.10	Mathematics 103, 203, 105 Physics 101, 201, 301 Chemistry 101, 201 Biology 301
10.12	Mathematics 103, 105, 203

10.13	There are no particular requirements for graduates of an anglophone cégep other than the DEC. Graduates of a francophone cégep must hold a DEC with a course in English of the 900 series or have an equivalent background in English.
A:	Interview
G:	Letter of intent
K:	Submission of a portfolio of representative work
N:	Placement test
P:	Competency in written and oral French, to be determined by a proficiency test, the results of which may lead to the rejection of the candidate or the requirement of additional university courses.
Q:	Competency in written and oral English, to be determined by a proficiency test, the results of which may lead to the rejection of the candidate or the requirement of additional university courses.
+	Two letters of reference

Program titles refer to Honours, Specialization and Major components where these exist. Full information about the programs offered under each title (including combinations with programs in other disciplines) is to be found in the section of the Calendar specified in the third column below.

BA, BSc, BEd

Profile	Program	Calendar Section
0.00A ^{Cert. only}	Adult Education	31.090.1
0.00	Anthropology	31.310
0.00	Anthropology and Sociology	31.310
0.00G,+	Applied Human Relations	31.010
10.9/5.00/6.00	Biochemistry	31.050
10.9/5.00/6.00	Biology	31.030
	Cell and Molecular Biology (see Biology)	
10.9/5.00/6.00	Chemistry	31.050
0.00	Child Studies	31.090
0.00	Classics	31.060
0.00A,G,K,+	Communication Studies	31.070
0.00A,G,+	Communication and Cultural Studies	31.070
0.00A,G,K,Q,+	Communication and Journalism	31.070, 31.180
0.00	Community and Ethnic Studies	31.310
0.00A,+	Community Service	31.010
0.00G,K	Creative Writing (see English and Creative Writing)	31.100
0.00A+	Early Childhood and Elementary Education	31.090
	Ecology (see Biology)	
0.00	Economics	31.080
0.00	Education	31.090
0.80	Education (Certificate)	31.090
0.00	Education: Adult Education	31.090.1
	Education (see Child Studies; Early Childhood and Elementary Education; Teaching of English as a Second Language)	
0.00	English	31.100
0.00G,K	English: Creative Writing	31.100
0.00G,K	English and Creative Writing	31.100
0.00	English and History	31.100, 31.160
0.00	English Literature	31.100
	Études françaises	
0.00	Études françaises	31.110
0.00	Langue française	31.110
10.5	Littératures de langue française	31.110
10.5	Traduction (Major)	31.110
10.5G	Traduction (Specialization)	31.110

Profile	Program	Calendar Section
10.9/5.00/6.00	Exercise Science	31.120
10.9/5.00/6.00	Exercise Science (Clinical Exercise Physiology, Athletic Therapy)	31.120
0.00A,+	Family Life Education	31.010
	French Studies — see Études françaises	
0.00	Geography (BA), Human Environment	31.130
10.9/5.00/6.00	Geography (BSc), Environmental Geography	31.130
10.9/5.00/6.00	Geology	31.140
10.5/6.00	German	31.060
0.00	History	31.160
0.00	Southern Asia Studies	31.160
0.00	History and English	31.160, 31.100
0.00	Information Studies	31.090
Appropriate	Interdisciplinary Studies — Individually Structured Program	31.170
10.5/6.00	Italian	31.060
0.00A,G,Q	Journalism	31.180
0.00	Judaic Studies	31.270
10.1	Leisure Sciences	31.010
0.00	Linguistics	31.060
0.00	Loneragan Interdisciplinary Studies	31.530
10.12/6.00	Mathematics and Statistics (BA)	31.200
10.10/5.00/6.00	Mathematics and Statistics (BSc)	31.200
10.12/6.00	Mathematics (Actuarial — BA)	31.200
10.10/5.00/6.00	Mathematics (Actuarial — BSc)	31.200
10.12/6.00	Mathematics (Pure and Applied — BA)	31.200
10.10/5.00/6.00	Mathematics (Pure and Applied — BSc)	31.200
0.00A,G	Pastoral Ministry (Cert. only)	31.330
0.00	Philosophy	31.220
10.10/5.00/6.00	Physics	31.230
10.10/5.00/6.00	Physics/Marketing	31.230
0.00	Political Science	31.240
10.1/4.03/6.00	Psychology (BA)	31.250
or 3.14/4.10 or 4.03		
5.00/6.00/10.1/10.9	Psychology (BSc)	31.250
5.00/6.00/10.1/10.9	Psychology (Behavioural Neuroscience Option)	31.250
0.00	Religion	31.270
	Religion — Judaic Studies (see Judaic Studies)	
0.00	Science and Human Affairs	31.300
0.00	Sociology	31.310
10.5/6.00	Spanish	31.060
10.12/6.00	Statistics (BA)	31.200
10.10/5.00/6.00	Statistics (BSc)	31.200
10.13	Teaching of English as a Second Language	
A,G,P,Q,+		31.320
0.72	Teaching of English as a Second Language (Certificate)	31.320
A,G,P,Q,+		
0.00	Theological Studies (Certificate)	31.330
A,G		
10.1	Therapeutic Recreation	31.010
0.00	Urban Studies	31.340
0.00A	Western Society and Culture	31.520
0.00	Women's Studies	31.560

Mature Student Entry

Concordia University has a tradition of concern for the education of Mature students; it has always sought to assist students of 21 and over to undertake undergraduate studies.

The primary aim of the Centre for Mature Students is to develop services to students returning to formal studies after an absence of many years. It is difficult to plunge suddenly into a very large urban University after years away from classes and studying; therefore, the Fellows and staff of the Centre hope to reach out to all Mature Entry students to offer them encouragement and guidance. The Centre has quarters on both campuses that function as a "home base" for students who want counselling or are simply in need of some social contact with their peers (see §14).

Extended Credit Program

Students admitted to BA and BEd Extended Credit Programs are required to complete an additional 30 credits for the degree and must include the following 30 credits:

- 30 elective credits, of which a maximum of 12 may be outside the Faculty of Arts and Science. Certain departments in the Faculty have specific requirements. Students intending to follow programs of concentration within these departments must include the specified components as part of their program.

BA Leisure Sciences and Therapeutic Recreation: SOCI 212³; BIOL 200^{6*} or 201³; PSYC 200⁶
**Students in the Therapeutic Recreation program must choose BIOL 200⁶.*

BA Mathematics: 9 credits in Mathematics — 203³, 204³, 205^{3*}
**Students not having MATH 202³, or the equivalent, must take it in place of one of their elective courses.*

BA Psychology: 3 credits in Mathematics
3 credits in Biology
6 credits in Psychology

Students admitted to the BSc Extended Credit Program are required to complete an additional 30 credits for the BSc degree and must include the following 30 credits:

- 6 credits in Chemistry 205³, 206³
- 6 credits in Mathematics 203³, 205^{3*}
- 12 credits in Physics 204³, 205³, 206³, 224¹, 225¹, 226¹
- 3 credits in Biology 201³
- 3 credits in Mathematics 204³ for students intending to enter programs of concentration in Mathematics or Physics;** or electives for all other students

**Students not having MATH 201³, or the equivalent, must take it in place of one of their elective courses.*

***Students not having MATH 202³, or the equivalent, must take it in place of one of their elective courses.*

NOTE: Students in the BA, BEd or BSc Extended Credit Program may not count towards their programs of concentration courses taken as part of the first 30 credits.

31.003 DEGREE REQUIREMENTS

In accordance with the recommendations of the Council of Universities of Québec, the credit base takes into account the total activity of the student. A student preparing for the BA, BEd, or BSc degree takes a minimum of 90 credits. Each credit represents, for the average student, a minimum of 45 hours spread across lectures, conferences, tutorials, laboratories, studio or practice periods, tests, examinations, and personal work.

Since the cégep programs are designed to give all students the opportunity to explore different fields and thus acquire a broad general basis for further study, the undergraduate programs in the Faculty of Arts and Science require some degree of concentration in specific areas. Detailed statements about these programs are made under the appropriate disciplinary headings in the sections of the Calendar that follow this general account of degree requirements. They represent four main forms of concentration: the *Minor*, the *Major*, the *Specialization*, and *Honours*; and a fifth form, the *Certificate*. The University's formal definitions of these kinds of programs are set out in §16.2.3; for the convenience of students in Arts and Science, those definitions as they are construed in the Faculty are briefly repeated below.

The *Minor* is a program consisting of a *minimum* of 24 specified credits in a single discipline and professing to give a basic introduction to the methodology and key concepts of that discipline. A Minor cannot in and by itself provide the concentration required of a candidate for a degree and is therefore always taken in combination with another program. In addition to the Interdisciplinary and Disciplinary Minors available in Arts and Science, students may register with approval for selected Minors in other Faculties. Available Arts and Science Interdisciplinary and Disciplinary Minors are listed in §31.170.

The **Faculty of Arts and Science** and the **Faculty of Commerce and Administration**:

With the approval of the Faculty of Commerce and Administration, Arts and Science students may take a Minor in Business Studies (see §61.140).

The Faculty of Arts and Science and the Faculty of Engineering and Computer Science:

With the approval of the Faculty of Engineering and Computer Science, Arts and Science students may take a Minor in Computer Science (see §71.70.5).

All Minors in the **Faculty of Fine Arts** are open to suitably qualified students.

The *Major* consists of a *minimum* of 36 specified credits taken in an approved sequence of courses. Normally within a major program not more than 36 credits are required from a single discipline or department. In certain programs, however, additional credits are required in cognate disciplines and departments. The Major provides a solid grounding in the academic knowledge comprehended within the field of concentration. To enter and remain in it, a student normally does not have to meet a special performance requirement; see, however, Western Society and Culture §31.520. Students with appropriate admission requirements, normally after completion of 24 credits, may request permission to be admitted to a second program of concentration in the Faculty, normally a Major. Exceptionally, students may complete a second Major in the Faculty of Fine Arts with permission of both Faculties. Students may apply to add a major program normally offered as part of a BA degree to a BSc degree or BEd degree or vice-versa. Attainment of acceptable GPA and satisfactory academic standing are required. The Faculty of Arts and Science will consider favourably such requests subject to admission quotas and the student having the appropriate prerequisite and admission profile (see §31.002). The student record and official transcript indicate all programs of concentration. Specific courses can only be used to fulfil the requirements of one program. Students completing the requirements of a BA, BEd, BSc, and/or BFA will elect one degree for graduation.

The *Specialization* consists of a *minimum* of 60 specified credits, normally not more than 54 credits of which are mandated from a single discipline or department. A Specialization provides a comprehensive education in the field of concentration, but to enter and remain in it, a student normally does not have to meet a special performance requirement unless otherwise indicated in the program. Students interested in subsequent "classification" by the provincial government may be advised to follow a Specialization or an Honours program. Second programs of concentration (Minor or Major) may be combined with a Specialization program according to regulations described above for those programs.

The *Honours* program consists of a *minimum* of 60 specified credits taken in an approved sequence of courses. Normally within an Honours program not more than 60 credits are mandated from a single discipline or department in the Arts and 72 credits in the Sciences. Additional credits may be required in cognate disciplines and departments. Superior academic performance is required for admission to and continuation in the Honours program, the precise level of such performance being determined by Senate. See §16.2.3 and *Faculty Honours Regulations* set out below for matters governing Honours programs at Concordia. An Honours degree or equivalent, because it testifies to a student's comprehensive education in a particular field, intellectual commitment to that field, and achievement of a high level of academic performance, has traditionally been required of entrants to postgraduate programs.

Graduation Requirements

1. A candidate for graduation must have successfully completed a program of concentration in the form of an *Honours*, *Specialization*, or *Major* program.
2. A candidate for graduation must have successfully completed at least 24 credits outside the single discipline or department from which the degree concentration has been chosen. Within every block of 30 credits taken towards the degree, a student will normally choose no more than 24 credits from any one discipline or department.
3. A candidate for graduation must have successfully completed at least 18 credits from courses in Arts and Science in every block of 30 credits taken towards the degree.
4. A candidate for the BA degree must have qualified for admission to, and successfully completed, a program leading to that degree. Specific admission requirements, expressed as cégep pre-Arts profiles, are given in §31.002. Students wishing to transfer out of one degree program into another must satisfy the admission requirements of the program they seek to enter.
5. Students enrolled in a regular degree program or an Extended Credit degree Program in the Faculty of Arts and Science may take ESL courses for degree credit, up to a maximum of six credits.
6. A candidate for the BSc degree must have qualified for admission to, and successfully completed, a program leading to that degree. Specific admission requirements, expressed as cégep pre-Science profiles, are given in §31.002. Students wishing to transfer out of one degree program into another must satisfy the admission requirements of the program they seek to enter.

7. A candidate for the BEd degree must have qualified for admission to, and successfully completed, the program leading to that degree. The admission and degree requirements are set out in §31.320.
 8. In general, the credits obtained for any course may not be used to satisfy the requirements of more than one program. Students first registered in certain Certificate programs may however apply credits obtained towards the Certificate to a degree program.
 9. Those students entering the University after September 1, 1978 as *Independent students* will be permitted to apply *no more* than 30 credits obtained as an Independent student towards any Arts and Science Faculty degree program.
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Supplemental Examinations (Arts and Science)

Supplemental examinations shall be offered only when, as a condition for passing the course, it is required that a student pass the final examination regardless of its weighting; or where the final examination contributes 50% or more of the final grade.

A student failing a course which comprises entirely, or in part, a laboratory or similar practicum, may not be eligible to write a supplemental examination.

All courses which a student fails and for which there is no supplemental examination shall be graded "FNS" or "R".

A failed student (see §16.3.10 V) may not write supplemental examinations.

Honours Programs

The Faculty of Arts and Science has programs leading to an Honours degree in certain selected fields. To enter an Honours program, students apply to the Departmental Honours Committee (adviser). The Departmental Honours Committee (adviser) will accept students into Honours, subject to review by the Faculty Honours Committee. The Departmental Honours Committee (adviser) will not normally accept students until they have obtained 30 credits at this University; students requiring fewer than 30 credits to graduate will not normally be accepted. The Department will notify the Faculty Honours Committee of the acceptance. The Faculty Honours Committee will review the departmental acceptance and notify the Department, the student, and the Office of the Registrar of the acceptance. In those cases where the Faculty Committee reverses a department's acceptance of a student into Honours, the Department may appeal the Faculty Committee's ruling to the Arts and Science Faculty Council.

NOTE: For Joint Honours Programs, please refer to §31.170 for Interdisciplinary Studies.

Honours Regulations (Faculty Regulations) see also §16.2.3

In order to qualify for an Honours degree, a student must comply with the regulations set forth below.

1. An Honours student must meet the general degree requirements, as well as the specific requirements for an Honours degree. A student must complete a minimum of 30 credits in the courses from the Honours component of the program at this University to receive a degree with Honours. In certain cases, these 30 credits may include some specific courses for which pro-tanto credit may not be awarded.
2. To be admitted into an Honours program, a student must have a minimum cumulative GPA of 3.00 ("B"). A student must maintain a minimum cumulative GPA of 3.00 as well as a minimum annual GPA of 3.00 within the Honours program. The minimum acceptable grade in any course is a "C". Averages are calculated on Concordia courses only.
3. Students who are required to withdraw from the Honours program may proceed in the corresponding Specialization or Major program. Reinstatement in the Honours program is possible only by appeal to the Faculty Honours Committee.
4. A student is allowed to qualify for only one Honours degree in either a single or combined Honours program. A student may qualify for a Minor or Major program in addition to an Honours program. In general, the credits obtained for a particular course may be used to satisfy the requirements of only one program.

Students may appeal their Department's determination of their status or interpretation of requirements in the Honours program. Such appeals should be addressed to the Chair of the Faculty Honours Committee. The Faculty of Arts and Science has an Honours Committee made up as follows: three faculty members; one student member; two Student Affairs advisers (non-voting); one representative of the Office of the Registrar (non-voting); the Vice-Dean, Student Affairs who acts as Chair.

The Faculty Honours Committee receives and reviews departmental recommendations for acceptance into Honours programs and graduation with Honours, and adjudicates disputes between students and departments concerning Honours programs. Since the Faculty Honours Committee cannot hear appeals contesting its own judgements, students and departments who wish to appeal a decision of the Faculty Honours Committee should address this appeal to the Dean of the Faculty.

General Certificate in Arts and Science

The General Certificate in Arts and Science is intended primarily for part-time students who qualify for admission to undergraduate degree programs, but who, at the time of registration, have not yet determined which program would best serve their interests. In particular, it is designed to meet the needs of Mature students who are unwilling or unable to make the long-term commitment involved in a regular or extended degree program. Students who have completed a university degree do not qualify for admission into the General Certificate in Arts and Science.

The Certificate requires successful completion of 30 credits. At least 24 of these credits must be chosen from courses offered by not more than three departments in the Faculty of Arts and Science. Credits earned in the Certificate may not be counted towards the additional credits required in extended programs.

Students may transfer into the Certificate program up to twelve credits earned in an incomplete degree or Certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

The General Certificate program in Arts and Science was first offered in the session commencing September 1978. Students who are admitted to the General Certificate in Arts and Science, and who wish to continue in a degree program should apply for admission to their program within the first 30 credits.

31.003.1 Academic Performance Regulations

Objectives

The objectives of these regulations are to ensure that the Faculty can certify that all of its graduates have achieved an acceptable level of scholarship.

Annual Weighted Grade Point Average (WGPA)* Requirements and Consequences

*See §16.3.10 for definition of Annual WGPA.

Acceptable standing requires that a student obtain an Annual WGPA of at least 2.00.

NOTE: Although a "C-" grade (1.70 grade points) is designated as satisfactory in §16.3.3, a WGPA of 2.00 is required for acceptable standing.

Students in acceptable standing may continue their programs of study, following the advice of their academic departments.

Conditional standing results when a student obtains an Annual WGPA of less than 2.00, but at least 1.50. A student is not permitted to obtain two consecutive conditional standing assessments.

Students in conditional standing may not write supplemental examinations.

Students in conditional standing will not be permitted to register for further study until their program has been approved by the appropriate adviser in their department.

They must obtain acceptable standing at the time of their next assessment.

Failed standing results when a student obtains an Annual WGPA of less than 1.50, or conditional standing in two consecutive periods of assessment.

Failed students may not write Supplemental examinations.

Failed students are required to withdraw from their program. Students who are in failed standing for a second time will be dismissed from the University. In subsequent years, should they wish to return to University studies, they must contact the Office of the Registrar for information concerning conditions and procedures for seeking readmission. Decisions of the relevant authority in the Faculty to which application is made are final.

Failed students who are not dismissed may apply for readmission through the Dean's Office of the Faculty to which they wish to be readmitted. If readmitted, they will be placed on academic probation. They must return to acceptable standing at the time of their next assessment. Other conditions will be determined at the time of readmission.

Graduation Requirements

Students must satisfy all course requirements and be in acceptable standing.

The standings of potential graduates who have attempted less than 12 credits since their last assessment are determined on the basis that these credits constitute an extension of the last assessment period.

Potential graduates who fail to meet the requirements of acceptable standing, but meet the requirements of conditional standing, will have the following options:

- a) register for an additional 12 credits and, at the next assessment, meet the requirements for acceptable standing;
or
- b) register for fewer than 12 additional credits.

In this case, standing will be determined on the basis that these extra credits constitute an extension of the last assessment period.
For both option a) and option b), the additional courses taken must be approved by the appropriate member of the Dean's Office, in consultation with the student's department where necessary.

Dean's Office

Dean's Office is to be understood as being the appropriate member of the Dean's Office, normally the Vice-Dean, Student Affairs, or delegate.

31.010

APPLIED HUMAN SCIENCES

Faculty	<p><i>Chair</i> RANDY B. SWEDBURG, <i>Professor</i></p> <p><i>Professor of Applied Human Sciences and Psychology, and Graduate Program Director</i> DOROTHY MARKIEWICZ</p> <p><i>Professors</i> JAMES F. GAVIN MARILYN TAYLOR</p> <p><i>Associate Professors</i> GHISLAINE GUÉRARD RAYE KASS BLUMA LITNER</p>	<p>VARDA MANN-FEDER LISA OSTIGUY</p> <p><i>Assistant Professors</i> CATHERINE CONNOLLY DONALD W. DE GUERRE MARTHA THOMAS</p> <p><i>Lecturer</i> ROBERT HOPP</p> <p><i>Adjunct Professors</i> JAMES KASS EDITH SEASHORE</p>
	<p><i>Location</i> <i>Loyola Campus</i> 7141 Sherbrooke St. W., Room: VE 227 (514) 848-3330</p>	<p><i>Sir George Williams Campus</i> Annex F, Room: 104 (514) 848-2260</p>
Department Objectives	<p>The strategic objective of the Department of Applied Human Sciences is to improve quality of life and well-being. This is accomplished through the integration of theory and practice to promote effective practitioner skill. The Department of Applied Human Sciences is an interdisciplinary and applied academic unit which generates knowledge and provides practice-based education in human relations, leisure sciences, therapeutic recreation, human systems intervention, family life education and community service. Involvement in practical contexts beyond the University provides an important link with members of the community, thereby offering a genuine environment for the exchange of knowledge and expertise.</p>	
Programs	<p><i>Students in Leisure Sciences and Therapeutic Recreation are required to complete the appropriate entrance profile (10.1) for entry into the programs.</i> <i>Students are responsible for satisfying their particular degree requirements.</i> <i>The superscript indicates credit value.</i></p> <div> <div> <p>60 BA Specialization in Human Relations <i>NOTE: INTE 296 or equivalent is a prerequisite for this program.</i></p> <p>18 AHSC 220³, 230³, 232³, 245³, 260³, 270³</p> <p>15 AHSC 330⁶, 370³, 380³, 382³</p> <p>6 AHSC 439⁶</p> <p>6 Chosen from AHSC 420⁶, 440⁶</p> <p>15 Elective credits chosen from AHSC 225³, 241³, 253³, 254³, 256³, 314³, 316³, 319³, 323³, 333³, 335³, 351⁶, 360³, 371³, 375³, 422³, 444³, 460⁶, 470³</p> <p>60 BA Specialization in Leisure Sciences</p> <p>12 AHSC 220³, 230³, 241³, 260³</p> <p>15 AHSC 350³, 361³, 371³, 380³, 382³</p> <p>12 AHSC 427³, 431³, 437⁶</p> <p>9 HIST 215³; PHIL 255³; and either PSYC 286³ or SOCI 244³</p> <p>12 Chosen from Recreation Programming or Recreation Administration</p> <p><i>Recreation Programming</i> AHSC 245³, 281³, 310³, 314³, 316³, 319³, 323³, 333³, 340³, 360³, 421³, 422³, 444³, 450³, 460⁶, 490³, 491³</p> </div> <div> <p><i>Recreation Administration</i> COMM 217³, 222³, 305³, 308³; ECON 201³, 203³; MANA 266³; MARK 213³</p> <p>60 BA Specialization in Therapeutic Recreation</p> <p>15 AHSC 220³, 230³, 241³, 260³, 281³</p> <p>21 AHSC 350³, 361³, 380³, 381³, 382³, 383³, 384³</p> <p>9 AHSC 427³, 432³, 450³</p> <p>9 AHSC 438⁹</p> <p>6 HIST 215³; PHIL 255³</p> <p>42 BA Major in Human Relations</p> <p>18 AHSC 220³, 230³, 232³, 245³, 260³, 270³</p> <p>6 AHSC 330⁶</p> <p>3 AHSC 435³</p> <p>15 Elective credits chosen in consultation with the Department, with no more than six credits at the 200 level, from AHSC 225³, 241³, 253³, 254³, 256³, 314³, 316³, 319³, 323³, 333³, 335³, 351⁶, 360³, 371³, 375³, 420⁶, 422³, 440⁶, 444³, 460⁶, 470³</p> </div> </div>	

42 BA Major in Leisure Sciences	30 Minor in Human Relations
24 AHSC 220 ³ , 230 ³ , 241 ³ , 260 ³ , 350 ³ , 361 ³ , 371 ³ , 427 ³	12 AHSC 220 ³ , 230 ³ , 232 ³ , 260 ³
9 HIST 215 ³ ; PHIL 255 ³ ; and either PSYC 286 ³ or SOCI 244 ³	6 AHSC 330 ⁶
9 Chosen from AHSC 245 ³ , 281 ³ , 310 ³ , 314 ³ , 316 ³ , 319 ³ , 323 ³ , 333 ³ , 340 ³ , 360 ³ , 421 ³ , 422 ³ , 444 ³ , 450 ³ , 460 ⁶	12 Elective credits chosen from AHSC 225 ³ , 241 ³ , 245 ³ , 253 ³ , 254 ³ , 256 ³ , 270 ³ , 314 ³ , 316 ³ , 319 ³ , 323 ³ , 333 ³ , 335 ³ , 351 ⁶ , 360 ³ , 371 ³ , 375 ³ , 422 ³ , 444 ³ , 460 ⁶ , 470 ³

Certificate in Community Service

The Department of Applied Human Sciences offers a 30-credit program leading to the Concordia University Certificate in Community Service. Students may transfer into the Certificate program up to 12 credits, as approved by a departmental undergraduate adviser, earned in an incomplete degree or Certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Admission Requirements

General admission requirements are listed in §13.

Students are required to complete the 0.00A,+ entrance profile to enter the Certificate.

Students should be actively involved in community service, either as staff or as volunteers or members of boards, committees, or councils of community organizations and agencies.

Mature entry students require additional prerequisite: ENGL 212³.

30 Certificate in Community Service

NOTE: AHSC 230³, 232³, and 270³ are prerequisites for courses included in this Certificate.

Phase I

9 AHSC 256³, 260³, 370³

Phase II

6 AHSC 330⁶

Phase III

6 Chosen from AHSC 420⁶, 440⁶, 460⁶

9 Elective credits chosen from AHSC 220³, 225³, 245³, 314³, 316³, 319³, 333³, 335³, 371³, 375³, 422³, 444³

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the program, chosen in consultation with the Coordinator of Undergraduate Programs.

Certificate in Family Life Education

The Department of Applied Human Sciences offers a 30-credit program leading to the Concordia University Certificate in Family Life Education. Students may transfer into the Certificate program up to 12 credits, as approved by a departmental undergraduate adviser, earned in an incomplete degree or Certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Admission Requirements

General admission requirements are listed in §13.

Students are required to complete the 0.00A,+ entrance profile to enter the Certificate.

Students should be actively involved in family life education through a sponsoring community agency or organization; or interested in becoming more effective family life educators.

Mature entry students require additional prerequisite: ENGL 212³.

30 Certificate in Family Life Education

NOTE: AHSC 220³, 230³, and 232³ are prerequisites for courses included in this Certificate.

Phase I

12 AHSC 253³, 254³, 260³, 355³

Phase II

6 AHSC 330⁶

Phase III

3 AHSC 435³

9 Elective credits chosen from AHSC 225³, 245³, 256³, 270³, 314³, 316³, 319³, 323³, 335³, 360³, 444³, 460⁶

NOTE: In the event that a student is awarded an exemption from a required course, it will be

necessary for the student to replace that course with another relevant to the program, chosen in consultation with the Coordinator of Undergraduate Programs.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

AHSC 220 *Life Span Growth and Development for Practitioners* (3 credits)

This course provides a theoretical overview of the developmental patterns and typical challenges in each stage of human life from birth to death. Students learn about normative changes in the context of historical and cultural influences in relation to identity-related differences. The course focuses on typical age-related concerns and intervention-related issues.

AHSC 225 *Self-Managed Learning* (3 credits)

This course fosters effectiveness in orienting and directing learning which is precipitated by new personal interests and goals and/or by changing personal circumstances. It enables students to create clear personal visions, set relevant learning goals, create and organize related activities, and assess their progress. The course provides learning process models and ways to identify personal stylistic differences which affect personal learning progress and strategies.

NOTE: Students who have received credit for APSS 415 may not take this course for credit.

AHSC 230 *Interpersonal Communication and Relationships* (3 credits)

This course is designed to provide knowledge and skill in building and maintaining interpersonal relationships characterized by mutual understanding and respect. Students can expect to enhance their understanding of effective communication behaviour and to improve their abilities to attend to verbal and non-verbal communication from others, exchange constructive feedback with others, engage in effective problem-solving, address and deal constructively with conflict, and communicate across differences, such as gender and race. Conceptual perspectives feature attention to contextual influences in relationship dynamics and the role of affect in interpersonal communication. The course also examines ethical and value considerations.

NOTE: Students who have received credit for APSS 240 may not take this course for credit.

AHSC 232 *Working in Task Groups* (3 credits)

Prerequisite: AHSC 230. This course is an introduction to understanding interaction and developmental processes of small groups and skill-building for effective participation. It enables students to learn observational frameworks, process observation, collaborative problem-solving and decision-making, and facilitative member roles. It provides opportunities to learn to draw relationships between observations and conceptualizations which highlight developmental

stages, contextual and structural influences (such as minority-majority relations), and personal style differences.

NOTE: Students who have received credit for APSS 240 may not take this course for credit.

AHSC 241 *Recreation and Leisure in Contemporary Society* (3 credits)

This course introduces students to the theories and relationships of play, perceptions of free and discretionary time, concepts of leisure, and the historical foundations for the discipline. The concepts are presented as integral components of today's lifestyle. In addition, the organized recreation system is examined, with an introduction to the leisure services delivery system. The students also examine the role that leisure plays in current societal issues.

NOTE: Students who have received credit for LESR 241 may not take this course for credit.

AHSC 245 *Respecting Diversity in Human Relations* (3 credits)

Prerequisite: AHSC 230 or permission of the Department. This course examines the significance of identity-related differences, such as disability, age, gender, race, ethnicity, sexual orientation, in human relationships and social settings. Students can expect to learn about the nature and effects of negative stereotyping and biases in personal perspectives, institutional practices, and cultural norms. It fosters the development of awareness and skill in communicating and relating across these differences.

NOTE: Students who have received credit for APSS 399E may not take this course for credit.

AHSC 253 *Sexuality in Human Relations* (3 credits)

Prerequisite: AHSC 230 or permission of the Department. This course provides students with knowledge of physical and psychosocial aspects of sexuality in relationships through life and examines values, attitudes, and issues related to the development and expression of sexuality. Topics include gender, family, cultural and media influences; historically and culturally based attitudes; prevention and sexually transmitted diseases; self-perception and identity in sexuality; and emotion and sexuality. The course aims to foster respect for persons and diversity.

NOTE: Students who have received credit for APSS 353 may not take this course for credit.

AHSC 254 *Family Communication* (3 credits)

Prerequisite: AHSC 220. This course is a requirement for students enrolled in the Certificate in Family Life Education. This course is an exam-

ination of patterns, effective approaches, and issues in communication among persons in primary partnerships and families. It also explores topics such as diversity in forms of “family”, decision-making, problem-solving, power relations, gender issues, managing differences in expectations, and the influences of cultural, social, and economic contexts.

NOTE: Students who have received credit for APSS 354 may not take this course for credit.

AHSC 256 Interviewing (3 credits)

This course reviews different forms and concepts relevant to interviewing for use in work and community settings. It examines communication influences on the interviewer and interviewee and the limitations of different interview approaches. It enables students to structure and design interviews, to build rapport, and to manage information flow.

NOTE: Students who have received credit for APSS 356 may not take this course for credit.

AHSC 260 Program Planning, Design and Evaluation (3 credits)

The course prepares students to construct effective interactive programs designed for specific client populations. Using program design principles and practices, students match learning activities to desired program outcomes, while considering participant qualities and contextual features. Emphasis is placed on assessment, design, and evaluation knowledge and skills.

NOTE: Students who have received credit for LESR 261 may not take this course for credit.

AHSC 270 Introduction to Intervention in Human Systems (3 credits)

This course is an introduction to theory of human systems change from an interventionist perspective. It overviews general strategies of human systems intervention and salient models of practice highlighting conditions under which different intervention strategies are most effective. It especially focuses on the principles of fostering participation, collaborative inquiry, process facilitation and consultation, experiential learning, and action research. The course also features attention to values and ethical issues associated with specific strategies.

NOTE: Students who have received credit for APSS 250 may not take this course for credit.

AHSC 281 Introduction to Therapeutic Recreation (3 credits)

An examination of the fundamental concepts of therapeutic recreation. Included is the study of the historical foundations and the basic terminology, purposes, and theories of therapeutic recreation.

NOTE: Students who have received credit for LESR 281 may not take this course for credit.

AHSC 298 Selected Topics in Applied Human Sciences (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

AHSC 310 Tourism in Canada (3 credits)

This course presents an examination of the tourism industry in Canada, including concepts, research, practices, and promotion. Topics covered include destination motivation, commercial recreation, business travel, trends in tourism development, government agencies, the economics of promotion, social objectives, market segmentation, and ethical and legal considerations.

NOTE: Students who have received credit for LESR 210 or 211 may not take this course for credit.

AHSC 314 Adolescence: Issues and Intervention (3 credits)

Prerequisite: AHSC 220. This course links knowledge of adolescent development to a more detailed examination of related adolescent patterns and issues, including peer relations and friendship, parental and family relations, identity, sexuality and gender, and socio-economic and cultural influences. Directed towards students interested in working with adolescents, the course combines theoretical and practical knowledge relating to adolescents, their parents and their concerns for the purpose of enhancing the adolescent experience.

NOTE: Students who have received credit for APSS 313 may not take this course for credit.

AHSC 316 Adulthood: Patterns and Transitions (3 credits)

Prerequisite: AHSC 220, 230 or permission of the Department. This course examines transitions and developmental change through early adulthood and middle age. Featuring a narrative and autobiographical approach, it explores the nature and significance of life transitions, choices and contextual influences in shaping the course of adult life. It includes a consideration of the values inherent in notions of maturity, optimal environments, and interventions to enhance quality of life.

NOTE: Students who have received credit for APSS 463 may not take this course for credit.

AHSC 319 Older Adulthood: Issues and Intervention (3 credits)

Prerequisite: AHSC 220. This course explores developmental change patterns and differences among people in older adulthood. Topics include retirement and pensions, concepts of health, fitness, well-being and models of health care, housing and transportation, leisure, family and social relations, ethnicity and aging, loss and grief, death and dying. Designed for persons interested in working with older adults, the course fosters awareness of myths, stereotypes and ageism, and emphasizes an attention to community social support and interventions which are enabling.

NOTE: Students who have received credit for APSS 318 or 419 or for this topic under a LESR 398 number may not take this course for credit.

AHSC 323 Women and Leisure (3 credits)
Prerequisite: 30 credits. This course explores the many aspects of modern society that impact upon women's leisure. Stereotypes, violence, sexism, and societal expectations are topics covered in this course. The historical, modern, and future views of women at leisure are discussed.

NOTE: Students who have received credit for this topic under a LESR 398 number may not take this course for credit.

AHSC 330 Leadership in Small Groups
(6 credits)

Prerequisite: AHSC 230, 232; 260 previously or concurrently. This course develops facilitative approaches to leadership in small groups. Students learn effective ways to observe and to interpret the significance of group behaviour for the purpose of intervening effectively. The course highlights factors optimizing participation, patterns of communication and influence, decision-making, problem-solving, collaborative planning, conflict management, and effects of gender and other identity-related differences. It assists students to identify their leadership styles and to foster flexibility in adapting to diverse group situations.

NOTE: Students who have received credit for APSS 331 may not take this course for credit.

AHSC 333 Leisure and the Environment
(3 credits)

Prerequisite: 30 credits. This course examines the state of the natural environment, and explains how leisure service providers play a crucial leadership role in fulfilling the needs of both the public and the environment.

NOTE: Students who have received credit for this topic under a LESR 398 number may not take this course for credit.

AHSC 335 Power and Conflict Resolution in Human Systems (3 credits)

Prerequisite: Completion of 30 credits for students enrolled in a social science program or permission of the Department. This course gives students a theoretical and practical overview of the role of power and conflict in human relationships and human systems — groups, organizations, and communities. The concept of power is explored in depth since the use of power is central in both the creation and the resolution of conflict. The course focuses on the development of analytical tools that serve to identify the different elements leading to, maintaining or escalating conflicts. Particular attention is given to ethics associated with the use of power and management of conflict.

AHSC 340 Employee Recreation Services
(3 credits)

Prerequisite: AHSC 241. Examination of the origins and development of recreation related to the place of employment. Critical analysis of the research literature in the areas of: work/leisure relationships; cost/benefits; government inter-

vention; program design and family involvement.

NOTE: Students who have received credit for LESR 340 may not take this course for credit.

AHSC 350 Leisure Education (3 credits)

Prerequisite: AHSC 241. This course offers an introduction to the field of leisure education. The history and underlying philosophy of the concept is presented. The roles of the school, community, and community-serving agencies are examined. Existing models are analysed and discussed.

NOTE: Students who have received credit for LESR 350 may not take this course for credit.

AHSC 351 Basic Counselling Skills and Concepts (6 credits)

Prerequisite: AHSC 230. This course introduces students to counselling theories and develops an understanding for theoretical and value frameworks of the helping relationship. It fosters the development of basic helping relationship skills applicable in everyday relationships in work and social settings. Skill areas include attending skills, such as attending to nonverbal behaviour, reflection of content, reflection of feeling, paraphrasing and summarizing; and influencing skills, such as interpretation and analysis. Also highlighted are ethical issues and attention to cultural differences.

NOTE: Students who have received credit for APSS 450 may not take this course for credit.

AHSC 355 Foundations of Family Life Education (3 credits)

Prerequisite: AHSC 230, 232, 254; 260 previously or concurrently, and enrolment in the Certificate in Family Life Education. This course examines Family Life Education from its inception as a field of practice to its current status in North America. It highlights complex related issues and the role of the educator, including attention to personal values and ethical principles of the practitioner. Topics include distinctions between prevention education and therapeutic intervention, and an overview of the range of different family life education programs and current practices.

NOTE: Students who have received credit for APSS 455 may not take this course for credit.

AHSC 360 Play, Adult Learning and Development (3 credits)

Prerequisite: AHSC 241. This course examines the concept of play in adult learning and development. Gender, age, ethnic and social class diversity are explored as they relate to adult play behaviour.

NOTE: Students who have received credit for LESR 360 may not take this course for credit.

AHSC 361 Leisure Services Leadership
(3 credits)

Prerequisite: AHSC 230, 241. This course offers an analysis of leadership theory and its application to leisure services. Major topics are the principles and practices of leadership, group

dynamics, leadership skill development and program planning, and the unique role of the leisure leader.

NOTE: Students who have received credit for LESR 361 may not take this course for credit.

AHSC 370 *Principles and Practices of Human Systems Intervention*
(3 credits)

Prerequisite: AHSC 270. The focus of this course is on the *practice* of human system intervention from a pragmatic as well as a theoretical perspective. The course emphasizes collaborative strategies for effecting change in human systems within a broad range of intervention alternatives. It focuses on the interventionist's role in effective change strategy development, initiation, management, and evaluation. Students can also expect to develop intervention practice skills including issue definition and assessment, data gathering techniques, intervention planning processes, information feedback mechanisms and processes, and change evaluation methodologies. The course is taught with a special focus on personal and professional values and ethical issues related to human systems intervention.

AHSC 371 *Community Recreation Planning* (3 credits)

Prerequisite: AHSC 241, 260. The course focuses on the application of recreation planning, theory, and skills. It examines methods and procedures used to assess client needs, design and deliver programs and services, and evaluate their impact. Practical experience is gained through a combination of field experience, project planning, and group work.
NOTE: Students who have received credit for LESR 371 may not take this course for credit.

AHSC 375 *Organizational Leadership: A Human Systems Approach*
(3 credits)

Prerequisite: AHSC 270 or permission of the Department. This course is an introduction to the practice of leadership in organizations with a human systems approach and perspective. The course examines a range of theoretical concepts current in organizational leadership practice including systems thinking, team-based leadership, and strategy formulation from a leadership perspective. It provides an opportunity for students to examine ethics, values, and abilities required in organizational leadership today.

AHSC 380 *Quantitative Research Methods for Practitioners* (3 credits)

Prerequisite: SOCI 212 or equivalent. This course gives an overview of a range of data collection and analysis strategies which are relevant to collaborative and participative intervention practice. It examines practical considerations for selecting specific quantitative approaches and prepares students to formulate and administer intervention-related questionnaires, to conduct basic quantitative analyses, and to present data

results to interested individuals and groups. The course also examines basic ethical requirements in conducting applied social research.

NOTE: Students who have received credit for APSS 490 may not take this course for credit.

AHSC 381 *Concepts in Therapeutic Recreation Programming*
(3 credits)

Prerequisite: AHSC 241, 260, 281. This course explores current therapeutic recreation practices with emphasis on rehabilitation in community and clinical settings such as hospitals, group homes, psychiatric centres, rehabilitation clinics, and correctional centres. Leisure planning and assessment models are studied to identify the modes of recreational activity which may be used as an intervention.

NOTE: Students who have received credit for LESR 381 may not take this course for credit.

AHSC 382 *Qualitative Research Methods for Practitioners* (3 credits)

Prerequisite: AHSC 380 (recommended to be taken in the same academic year). This course gives an overview of a range of qualitative approaches to practical projects and interventions. It prepares students to design and conduct interviews (including making decisions about respondent selection) with individuals and in focus groups, as well as participant observation. It also enables students to analyse qualitative data from these sources as well as documentary sources in light of practical project purposes. The course highlights special ethical considerations in conducting qualitative forms of applied social research.

NOTE: Students who have received credit for APSS 490 may not take this course for credit.

AHSC 383 *Therapeutic Recreation and Physical Disabilities* (3 credits)

Prerequisite: AHSC 220, 281. This course gives an overview of the role and impact of therapeutic recreation services for individuals with physical disabilities and limitations. It analyses the barriers to recreation participation along with the planning and designing of a safe and accessible recreational environment.

NOTE: Students who have received credit for LESR 481 may not take this course for credit.

AHSC 384 *Therapeutic Recreation: Cognitive Disabilities and Illness* (3 credits)

Prerequisite: AHSC 220, 281. This course gives an overview of the role of therapeutic recreation services for individuals with cognitive disabilities and limitations or illness. It focuses on the etiology, impact, and barriers related to specific conditions. It also studies legislation trends and resources for community recreation integration and the role of transitional programs.

NOTE: Students who have received credit for LESR 481 may not take this course for credit.

AHSC 398 *Selected Topics in Applied Human Sciences* (3 credits)

AHSC 399 *Selected Topics in Applied Human Sciences* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

AHSC 420 *Organization Development* (6 credits)

Prerequisite: AHSC 230, 232, 330; or permission of the Department. This course examines organizations as systems and models of practice for organization change. Emphasizing process consultation, it provides knowledge concerning entry and contracting; identifying organizational problems and goals for change; analysing organizational structures and dynamics relevant to intervention planning; methods of gathering, organizing, and presenting pertinent data to the organization; collaborative intervention planning; approaches to evaluating intervention outcomes; ethical considerations; and the impact of personal values and priorities.

NOTE: Students who have received credit for APSS 420 may not take this course for credit.

AHSC 421 *Political and Legal Aspects of Leisure Services* (3 credits)

Prerequisite: AHSC 241; 60 credits. This course provides students with a theoretical understanding of the complexity of providing leisure services in the province of Québec. The course examines the administration of leisure services in municipal, regional, provincial, and federal governments. The course examines law as it applies to aspects of recreational activities in the areas of organization, supervision, and participation. The course covers the Québec Civil Code, the Canadian Constitution, and the Québec and Canadian Charter of Rights and Freedoms as they apply to the study of leisure.

NOTE: Students who have received credit for LESR 420 or 428 or for this topic under a LESR 398 or 498 number may not take this course for credit.

AHSC 422 *Youth and Leisure* (3 credits)

Prerequisite: AHSC 330 or 361. This course develops an understanding of the leisure needs of youth from emotional, physical, psychological, and sociological perspectives. Major areas of discussion include leisure preferences and needs assessment, strategies for programming, dealing with youth-at-risk, and recreational opportunities for youth. Lectures and laboratory.

NOTE: Students who have received credit for this topic under a LESR 399 number may not take this course for credit.

AHSC 427 *Administration of Leisure Services* (3 credits)

Prerequisite: AHSC 361; AHSC 371 or 381; 60 credits. This course offers an analysis of the processes involved in planning and managing

leisure service delivery systems. Topics to be studied include principles of planning, organization, budgeting, and supervision.

NOTE: Students who have received credit for LESR 426 or 427 may not take this course for credit.

AHSC 431 *Leisure Sciences Seminar* (3 credits)

Prerequisite: AHSC 361, 371; HIST 215; PHIL 255; 60 credits. This is a third-year interdisciplinary seminar in which students can tie together all they have learned in the Leisure Studies program. Additionally, students are set on a course of study that should continue after they graduate so that they can keep up with future developments in this area.

NOTE: Students who have received credit for LESR 431 may not take this course for credit.

AHSC 432 *Seminar in Therapeutic Recreation* (3 credits)

Prerequisite: AHSC 361, 381; HIST 215; PHIL 255; 60 credits. This is a third-year interdisciplinary seminar in which students can tie together all that they have learned in the Therapeutic Recreation program. Additionally, students are set on a course of study that should continue after they graduate so that they can keep up with future developments in this area.

NOTE: Students who have received credit for LESR 432 may not take this course for credit.

AHSC 435 *Fieldwork Practice* (3 credits)

Prerequisite: AHSC 330. This course must be taken in final year. This course provides an opportunity for students to integrate theory into practice in the design, facilitation and evaluation of small group process. Students lead one small task or learning group in a community, an organizational or an institutional setting. The fieldwork is combined with class sessions for orientation, supervision, reflection and evaluation.

AHSC 437 *Internship in Leisure Sciences* (6 credits)

Prerequisite: AHSC 241, 260, 361, 371. This course provides students with an opportunity to design, implement, and evaluate programs; to facilitate groups in a variety of settings; and to establish working relationships with field personnel. In consultation with their supervisors, students select a site related to their learning interests. Students learn to develop and manage their own project and to self-assess their work. The course includes fieldwork, seminars, and team meetings.

NOTE: Students who have received credit for LESR 464 or AHSC 436 may not take this course for credit.

AHSC 438 *Internship in Therapeutic Recreation* (9 credits)

Prerequisite: AHSC 260, 281, 361, 381. This course provides students with an opportunity to design, implement, and evaluate programs, to facilitate groups in a variety of settings, and to

establish working relationships with field personnel. In consultation with their supervisors, students select a site related to their learning interests. Students learn to develop and manage their own project and to self-assess their work. The course includes fieldwork, seminars, and team meetings.

NOTE: Students who have received credit for LESR 464 or AHSC 436 may not take this course for credit.

AHSC 439 Internship in Human Relations
(6 credits)

Prerequisite: AHSC 230, 232, 330, 370; AHSC 420 or 440 previously or concurrently; permission of the Department. This course provides students with an opportunity to design, implement, and evaluate small group leadership in several settings, and to negotiate working relationships with site personnel. Students will be solely responsible for facilitating several task or learning groups in community, work, or educational settings. The sites will be selected according to students' learning interests and in consultation with the course instructor. The course includes supervisory team meetings and internship seminar sessions.

NOTE: Students who have received credit for AHSC 436 may not take this course for credit.

AHSC 440 Community Development
(6 credits)

Prerequisite: AHSC 230, 232, 330; or permission of the Department. This course examines basic community development models of practice, the development of the intervenor-community relationship, and approaches to analysing and defining community problems and issues. Students learn to identify community structures and inter-group dynamics relevant to intervention planning, to gather and organize data for use by communities, to develop intervention plans which foster community participation and leadership, and to evaluate intervention outcomes. The course fosters critical awareness of ethical considerations and of issues such as respecting diverse cultural and value differences.

NOTE: Students who have received credit for APSS 440 may not take this course for credit.

AHSC 444 The Older Adult and Leisure
(3 credits)

Prerequisite: AHSC 232 or 361. This course examines the aging process in the physical, cognitive, and affective domains. It familiarizes the student with the characteristics of the aging population as related to leisure, recreation, and lifestyle. It focuses on developing and understanding the impact of lifelong leisure in the aging process. The course reviews issues related to the phenomenon of leisure in retirement and discusses the process of delivering leisure services to older individuals.

NOTE: Students who have received credit for LESR 336 may not take this course for credit.

AHSC 450 Leisure Assessment and Counselling (3 credits)

Prerequisite: AHSC 350; 60 credits. This course focuses on the use of assessment applied to individual leisure abilities, interests and needs, and the application of counselling theory to the field of leisure services. A variety of assessment tools are analysed/interpreted. Theories, models, and methods of leisure counselling are discussed.
NOTE: Students who have received credit for LESR 450 may not take this course for credit.

AHSC 460 Health Promotion (6 credits)

Prerequisite: AHSC 232 or 361. This course helps students to develop intervention skills and theoretical understanding in the area of health promotion. It is of particular interest to students whose career interests involve lifestyle planning, health promotion, and stress management. Topics include health and wellness, stress and illness, psychological and physical self-appraisal processes, psychosomatic processes and disorders, understanding addictions and their management, health-promotion interventions, behavioural self-management, and issues in medical/psychological health compliance.

NOTE: Students who have received credit for APSS 460 may not take this course for credit.

AHSC 470 Basic Human Relations Laboratory (3 credits)

Prerequisite: Final year and permission of the Department. This is an intensive format six-day learning session through which students may expect to increase their awareness of how their behaviour affects others, increase their skill and understanding of effectively and responsibly communicating to and exchanging feedback with others, increase their understanding of leadership and authority relations, and deepen their understanding of group dynamics.

AHSC 490 Independent Study I (3 credits)

Prerequisite: Permission of the Department. Students work on topics in consultation with a study supervisor. The study may include readings, field studies, and/or research.

NOTE: Students who have received credit for LESR 490 may not take this course for credit.

AHSC 491 Independent Study II (3 credits)

Prerequisite: Permission of the Department. A student who has received credit for AHSC 490 may register for AHSC 491.

NOTE: Students who have received credit for LESR 491 may not take this course for credit.

AHSC 498 Advanced Topics in Applied Human Sciences (3 credits)

AHSC 499 Advanced Topics in Applied Human Sciences (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.030 BIOLOGY

Faculty	<p>Chair CLAIRE CUPPLES, Associate Professor</p> <p>Professors PAUL J. ALBERT EDWARD J. MALY ELAINE B. NEWMAN ROBERT M. ROY SYLVIA M. RUBY REGINALD K. STORMS</p> <p>Associate Professors JAMES GRANT PATRICK J. GULICK MURIEL B. HERRINGTON NARINDER N. KAPOOR BHUPINDER MANGAT J. DANIEL McLAUGHLIN ADRIAN TSANG</p>	<p>LUC VARIN PAUL WIDDEN</p> <p>Assistant Professors SELVADURAI DAYANANDAN IAN FERGUSON MARY P. MALY WILLIAM ZERGES</p> <p>Professor Emeritus RAGAI K. IBRAHIM</p> <p>Adjunct Professors CAROLYN BECKMAN KULDIP DHINDSA RALPH GERMINARIO LUC-ALAIN GIRALDEAU JACK A. KORNBLATT LOLITA ZAMIR</p>
Location	<p>Sir George Williams Campus Hall Building, Room: H 1260-6 (514) 848-3400</p>	
Department Objectives	<p>The Biology Department is dedicated to teaching and research that advance understanding of life from molecules and cells to organisms, populations, and entire ecosystems. The Department's programs inspire students with an appreciation of the rich diversity of the living world. Students acquire a comprehensive grounding in modern biology through classroom study as well as extensive hands-on training in research methodology. A variety of specialized laboratories and equipment supports both research and teaching activities.</p>	
Programs	<p><i>The Biology Department offers Honours and Specialization programs in Biology, Cell and Molecular Biology, and Ecology, as well as Major and Minor programs in Biology. Students planning a career or graduate studies in the biological sciences are normally expected to follow the appropriate Honours or Specialization program. The Major program is designed for students who wish to concentrate their studies in biology but at the same time wish to pursue general education in other disciplines. The Major program can be combined with a Major in another department.</i></p> <p><i>Students registered in the Honours, Specialization, or Major in Biology may select Biology electives in various subject areas in order to obtain a broad overview of the discipline. However, it is possible for students to pursue in-depth studies in specific areas such as animal biology, plant biology, or microbiology and biotechnology.</i></p> <p><i>The Minor program can only be taken by students registered in another degree program and provides an opportunity to gain a basic exposure to the main sub-disciplines of Biology or to pursue one such area in some depth.</i></p> <p><i>Students are strongly encouraged to take advantage of academic counselling services available in the Biology Department in order to select the program and courses that best meet their needs. Students may transfer among programs after the first year of study since the core courses in all programs are quite similar.</i></p>	
	<p>Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value. Students must apply to the departmental Honours adviser for formal admission to Honours programs. The application is usually made after completion of the first-year courses.</p>	
	<p>72 BSc Honours in Biology 33 CHEM 221^{3*}, 222^{3*}, 271³, BIOL 225³, 226³, 227³, 261³, 266³, 367³, 490⁶</p>	<p>3 Chosen from BIOL 322^{3****}, CHEM 212³ 3 Chosen from BIOL 346³, 364³, 383³, 449³, 483³</p>

- 33 Additional Biology credits*; a minimum of 12 credits in 300-level Biology courses and nine credits in 400-level Biology courses must be completed. A minimum of six credits must be selected from courses dealing with the biology of organisms from the following: BIOL 321³, 334³, 335³, 337³, 344³, 346³, 370³, 383³, 385³, 386³, 387³, 433³, 435³, 437³, 449³, 483³.
- 72 BSc Honours in Cell and Molecular Biology**
- 48 CHEM 212³, 221^{3*}, 222^{3*}, 271³, 375³, 477³, BIOL 225³, 226³, 261³, 266³, 364³, 367³, 368³, 466³, 490⁶
- 9 300- or 400-level Biology credits
- 15 400-level Biology and Chemistry elective credits including a minimum of:
9 Cell and Molecular Biology credits selected from: BIOL 441³, 443³, 461³, 462³, 464³, 465³, 468³, 469³, 470³, 471³, 498^{3***}
3 Biochemistry credits selected from: CHEM 471³, 472³, 478³, 481³, 498^{3***}
- 72 BSc Honours in Ecology**
- 36 CHEM 221^{3*}, 222^{3*}, 271³; BIOL 225³, 226³, 227³, 261³, 266³, 367³, 450³, 490⁶
- 3 Chosen from BIOL 322³ or equivalent
- 3 Chosen from BIOL 346³, 364³, 383³, 449³, 483³
- 12 Chosen from BIOL 321³, 350³, 351³, 353³, 354³
- 6 Chosen from BIOL 451³, 457³, 458³, 459³
- 12 Biology elective credits at the 300 or 400 level.
- 60 BSc Specialization in Biology**
- 27 CHEM 221^{3*}, 222^{3*}, 271³; BIOL 225³, 226³, 227³, 261³, 266³, 367³
- 3 Chosen from BIOL 322^{3****}; CHEM 212³
- 3 Chosen from BIOL 346³, 364³, 383³, 449³, 483³
- 27 Additional Biology credits*; a minimum of 12 credits in 300-level Biology courses and six credits in 400-level Biology courses must be completed. A minimum of six credits must be selected from courses dealing with the biology of organisms from the following: BIOL 321³, 334³, 335³, 337³, 344³, 346³, 370³, 383³, 385³, 386³, 387³, 433³, 435³, 437³, 449³, 483³.
- 66 BSc Specialization in Cell and Molecular Biology**
- 42 CHEM 212³, 221^{3*}, 222^{3*}, 271³, 375³, 477³; BIOL 225³, 226³, 261³, 266³, 364³, 367³, 368³, 466³
- 9 300- or 400-level Biology credits
- 15 400-level Biology and Chemistry elective credits including a minimum of:
9 Cell and Molecular Biology credits selected from: BIOL 441³, 443³, 461³, 462³, 464³, 465³, 468³, 469³, 470³, 471³, 498^{3***}
3 Biochemistry credits selected from: CHEM 471³, 472³, 478³, 481³, 498^{3***}
- 60 BSc Specialization in Ecology**
- 27 CHEM 221^{3*}, 222^{3*}, 271³; BIOL 225³, 226³, 227³, 261³, 266³, 367³
- 3 Chosen from BIOL 322³ or equivalent
- 3 Chosen from BIOL 346³, 364³, 383³, 449³, 483³
- 12 Chosen from BIOL 321³, 350³, 351³, 353³, 354³
- 6 Chosen from BIOL 450³, 451³, 457³, 458³, 459³
- 9 Biology elective credits at the 300 or 400 level.
- 45 BSc Major in Biology**
- 27 CHEM 221^{3*}, 222^{3*}, 271³; BIOL 225³, 226³, 227³, 261³, 266³, 367³
- 3 Chosen from BIOL 322^{3****}; CHEM 212³
- 3 Chosen from BIOL 346³, 364³, 383³, 449³, 483³
- 12 Additional Biology credits*; a minimum of nine credits in 300- and 400-level Biology courses must be completed.
- 24 Minor in Biology**
- 12 Chosen from BIOL 206³ or 261³; 225³, 226³, 227³
- 12 Biology elective credits
- *Students entering the program with cégep Organic Chemistry must replace these credits with elective credits.*
***Intermediate Topics in Biology (BIOL 398) and Advanced Topics in Biology (BIOL 498) may be taken as elective courses where the special topic is appropriate.*
****Advanced Topics in Biology (BIOL 498) and Advanced Topics in Chemistry (CHEM 498) may be taken as elective courses where the special topic is appropriate.*
*****See §200.7.*

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

BIOL 200 *Fundamentals of Human Biology* (6 credits)

A series of lectures, demonstrations, and seminars to provide non-biologists with a general survey of the fundamental principles of life, with special emphasis on the structures and

functions of human beings. Lectures only.
NOTE: Students registered in a Biology or Biochemistry program may not take this course for credit. Students who have completed cégep Biology 921/931 may not take this course for credit.

BIOL 201 *Introductory Biology* (3 credits)
Fundamentals of plant and animal biology: basic physics and chemistry of life; cell and tissue structures and functions; anatomy and physiology of human systems; survey of plant and animal taxonomy, ecology, heredity, and evolution. Lectures and laboratory.

NOTE: Students with cégep Biology 301 or equivalent may not take this course for credit. Students entering BIOL programs without cégep Biology 301 or equivalent must take this course, but not for program credit.

BIOL 202 *General Biology* (3 credits)
This course presents the fundamentals of biology including the basic physics and chemistry of life, the structure and functions of cell and tissues, and aspects of anatomy, physiology, taxonomy, heredity and evolution, with examples ranging from micro-organisms to humans. Lectures only.
NOTE: Students with cégep Biology 301, BIOL 201 or BIOL 298A may not take this course for credit. Students enrolled in BSc programs may not take this course for credit.

BIOL 203 *Fundamental Nutrition*
(3 credits)
This course deals with food composition (carbohydrates, lipids, proteins, vitamins, and minerals), its absorption and utilization, energy balance, special diets, and food technology. Lectures only.
NOTE: Students registered in a Biology or Biochemistry program may not take this course for credit.

BIOL 206 *Elementary Genetics* (3 credits)
A survey of classical and contemporary developments in the study of heredity, with particular attention to human examples. This course is open to the general student body. Lectures only.
NOTE: Students may not take this course for credit with BIOL 261.

BIOL 207 *Micro-Organisms and Humanity* (3 credits)
A course designed for students registered in a program other than one leading to the BSc degree. It considers the role of micro-organisms in plant and animal diseases, food spoilage, cellulose degradation, and water pollution, as well as their ecological, industrial, and pharmacological importance. Lectures only.
NOTE: Students registered in a Biology or Biochemistry program may not take this course for credit.

BIOL 208 *Environmental Biology*
(3 credits)
This course examines the principles and concepts of ecosystems, the interaction of organisms and their environment. Energy flow and nutrient cycling in ecosystems, population dynamics, and community organization. Lectures only.
NOTE: Students registered in a Biology or Biochemistry program may not take this course for credit.

BIOL 210 *Genetics and Human Welfare*
(3 credits)
A course on the principles of heredity as understood by modern biology. It deals also with the application of genetic principles to organisms, including humans. The biological basis of social problems is dealt with at some length. Organic evolution and its implications for human life and welfare are considered. Lectures only.
NOTE: Students registered in a Biology or Biochemistry program may not take this course for credit; may not be taken for credit with BIOL 206.

BIOL 225 *Form and Function of Organisms* (3 credits)
Prerequisite: Cégep Biology 301 or BIOL 201.
An introduction to plant and animal form and function is presented. This course provides an overview of basic physiological and morphological aspects of plants and animals that allow survival and reproduction. Topics in animal biology include animal architecture, internal fluids, homeostasis, digestion and nutrition, nervous and chemical coordination; topics in plant biology include plant organization, photosynthesis, respiration, water relations, and growth regulation. Reproduction and development of both plants and animals are introduced. Lectures only.
NOTE: Students who have received credit for BIOL 230 and 240, or BIOL 298D may not take this course for credit.

BIOL 226 *Biodiversity and Ecology*
(3 credits)
Prerequisite: Cégep Biology 301 or BIOL 201.
This course introduces the evolution, biodiversity, and ecology of organisms. The origin and diversity of life, from prokaryotes, through simple eukaryotes to multi-cellular organisms are introduced. Natural selection, speciation, and phylogeny, stressing evolutionary relationships in conjunction with changing conditions on earth, are presented. The course introduces major concepts in ecology: the physical and chemical environment, population structure, life histories, species interactions, communities, and ecosystems. Lectures only.
NOTE: Students who have received credit for BIOL 250 and 270, or BIOL 298E may not take this course for credit.

BIOL 227 *Laboratory Studies of Organisms* (3 credits)
Prerequisite: BIOL 226; BIOL 225 previously or concurrently.
Laboratory exercises are designed to acquaint students with biodiversity and to introduce methodologies common to studies of organisms and populations. This course includes field trips, dissections, use of taxonomic keys, and basic exercises in physiological function. Use of the microscope, variability within populations, basic techniques in microbiology, and elementary population dynamics are presented. Tutorials include videotapes of plant and animal

diversity, history, and behaviour. Laboratory and tutorial.

NOTE: Students who have received credit for BIOL 230, 240, and 270 may not take this course for credit.

BIOL 261 *Molecular and General Genetics* (3 credits)

Prerequisite: Cégep Biology 301 or BIOL 201; CHEM 221 previously or concurrently. Basic genetic principles, including mechanisms of meiosis and mitosis, Mendelian genetics, recombination, gene mapping, and chromosome rearrangements; an introduction to molecular genetics, including nucleic acid structure and biosynthesis transcription and translation; the course also includes an introduction to recombinant DNA technology and to concepts of population genetics. Lectures and tutorials.

BIOL 266 *Cell Biology* (3 credits)

Prerequisite: BIOL 261; CHEM 271 previously or concurrently. Structure and functions of the cell and its organelles: cytoskeleton, chromosomes, cell cycle and cell division, organelle biogenesis, cell differentiation, including the immune system and cell communication. Lectures only.

NOTE: Students who have received credit for BIOL 365 or this topic under a BIOL 298 number may not take this course for credit.

BIOL 298 *Selected Topics in Biology* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

BIOL 321 *Evolution* (3 credits)

Prerequisite: BIOL 225, 226. Through readings, discussions, and lectures, students explore the evidence for evolution, as well as current theories for the mechanisms that cause evolutionary change. Topics covered include principles of inheritance, the origin of genetic variation, adaptation through natural selection, random processes in evolution, the origin of species, and the role of macroevolutionary processes in shaping current patterns of biodiversity. Lectures only.

NOTE: Students who have received credit for BIOL 359 may not take this course for credit.

BIOL 322 *Biostatistics I* (3 credits)

Prerequisite: Twelve (12) BIOL credits in a Biology Major, Honours, or Specialization program. Statistical methods for the biological sciences; sampling; experimental design; data description; elementary probability; binomial, Poisson and Normal distributions; statistical inference; hypothesis testing; chi-square; analysis of variance; correlation; regression; covariance analysis; and analogous non-parametric techniques. Lectures and laboratory.

NOTE See §200.7

BIOL 334 *Vertebrate Embryology* (3 credits)

Prerequisite: BIOL 225, 226, 227 previously or concurrently. The fundamental processes of growth and development in vertebrates are examined. Morphogenetic events in selected vertebrate species are compared by laboratory study. Topics covered include reproduction, gametogenesis, fertilization, cleavage patterns, gastrulation, organogenesis, metamorphosis, regeneration, and extra-embryonic membranes. Lectures and laboratory.

BIOL 335 *Histology I* (3 credits)

Prerequisite: BIOL 225. A comparative study of the microscopic characteristics of cells, tissues, and organs of vertebrates. Lectures and laboratory.

BIOL 337 *Invertebrate Diversity* (3 credits)

Prerequisite: BIOL 225, 226, 227. This is a survey course that examines the phylogeny, structure, and some general aspects of the biology of the major invertebrate phyla. Lectures will emphasize phylogenetic and biological topics; classification and morphology will be emphasized in the laboratory. Lectures and laboratory.

BIOL 344 *Biology of Algae* (3 credits)

Prerequisite: BIOL 225, 226, 227 previously or concurrently. Taxonomy, physiology, and ecology of algae, with special consideration of their involvement in water pollution, sewage treatment, primary production, and their utilization in industry. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 246 may not take this course for credit.

BIOL 346 *Physiology of Plant Development* (3 credits)

Prerequisite: BIOL 225, 226, 227 previously or concurrently. Physiological and biochemical aspects of plant growth and development. Plant responses to growth regulators, their mode of action and their use in plant tissue culture. The role of light and temperature in seed germination, dormancy, and flowering. Lectures and laboratory.

BIOL 350 *The Ecology of Individuals* (3 credits)

Prerequisite: BIOL 225, 226. This course is designed to introduce students to the diversity of adaptations possessed by individuals which enables them to interact successfully with the abiotic and biotic environment. Major topics include adaptive responses to temperature, water, light, and other species. Physiological adaptations are emphasized. Lectures only.

NOTE: Students who have received credit for BIOL 398A (Intermediate Concepts in Ecology) may not take this course for credit.

BIOL 351 *Basic Population Ecology* (3 credits)

Prerequisite: BIOL 226. This course introduces

the processes which determine the distribution and abundance of individuals in populations. Population growth, density-dependent and density-independent population regulation, survivorship, life history parameters, the population dynamics of competition, predation and parasitism, and the roles of predation and competition in affecting community structure are discussed. Lectures and tutorials.

NOTE: Students who have received credit for BIOL 454 may not take this course for credit.

BIOL 353 *Communities and Ecosystems*
(3 credits)

Prerequisite: BIOL 225, 226; BIOL 227 previously or concurrently. This course presents an introduction to biological communities, the processes that maintain them and their emergent properties. Topics include the interactions between abiotic and biotic factors in determining community composition, the concepts of niche and habitat, succession theory, community diversity and stability, energy flow and nutrient cycling. Examples emphasize both aquatic and terrestrial ecosystems, and the major global biomes. Lectures only.

BIOL 354 *Behavioural Ecology* (3 credits)

Prerequisite: BIOL 226. Behavioural ecology is the study of behavioural adaptation. The topics include foraging, anti-predator, fighting, mating, reproductive and social behaviour. Students will be introduced to optimality and game theories. Lectures and tutorials.

NOTE: Students who have received credit for BIOL 358 or 453 may not take this course for credit.

BIOL 364 *Cell Physiology* (3 credits)

Prerequisite: BIOL 266. A survey of the mechanisms and physical processes involved in the functions of single cells and organelles, especially membrane-mediated functions: structures and properties of membranes, transport, signal transduction, motility, energy transduction. Lectures only.

BIOL 366 *Mechanisms of Development*
(3 credits)

Prerequisite: BIOL 225, 226, 227, 261. This course deals with the mechanisms of cellular interaction and genetic control which govern animal development and cell differentiation. This includes how cell movement and cell recognition take place, how the genome is restricted in differentiation, how cytoplasmic signals influence differentiation, how gradients affect development, how genes control segmentation, and how oncogenes, growth factors, and hormones influence development. The role of genetic engineering in the understanding of developmental processes is discussed. Lectures only.

NOTE: Students who have received credit for BIOL 463 may not take this course for credit.

BIOL 367 *Molecular Biology* (3 credits)

Prerequisite: BIOL 261; CHEM 271. DNA structure, recombination, gene structure, gene

expression, and its regulation. The experimental evidence that supports these concepts is also discussed. Lectures and tutorials.

NOTE: Students who have received credit for this topic under a BIOL 398 number may not take this course for credit.

BIOL 368 *Genetics and Cell Biology Laboratory* (3 credits)

Prerequisite: BIOL 364 previously or concurrently; CHEM 212 or 217. This course introduces students to the basic laboratory techniques of genetics, molecular biology, and cell biology. Experiments include identification, characterization, and genetic mapping of bacterial mutants, isolation of bacterial DNA and its use for transformation. Primary cultures of mammalian lymphocytes are studied with respect to proliferation using an ELISA technique. Physiological studies include cell membrane functions in red blood cells, active and facilitated transport in bacteria, oxygen evolution and ATP synthesis in chloroplasts, ATP synthesis and electron transport in mitochondria and nerve action potentials. Laboratory and tutorials.

BIOL 370 *Microbiology* (3 credits)

Prerequisite: Six credits chosen from BIOL 226, 261, CHEM 271; or permission of the Department. This course provides an in-depth study of the structure and function of microbes. It emphasizes the genetic and biochemical characteristics of microbes which distinguish them from plants and animals. Consideration is also given to the impact of microbes on the global environment and on the quality of human life. Lectures and laboratory.

BIOL 380 *Nutrition* (3 credits)

Prerequisite: CHEM 221, 222; CHEM 271 recommended. The concept of a balanced diet is studied in relation to caloric content and to protein, lipid, carbohydrate, vitamin, and mineral requirements. The consequences of dietary deficiencies are examined. Special topics such as dieting, organic foods, megavitamins, food additives, and toxins are discussed. Lectures only.

BIOL 381 *Biology of Pollutants* (3 credits)

Prerequisite: BIOL 225, 226. The purpose of this course is to study the impact of pollution on ecosystems. The major classes of pollutants are considered in relation to their nature, origin, and distribution, and particularly their mode of action on individual organisms and ecosystems. Air, water, and soil are examined with their respective pollutants and a major emphasis is given to quantitative assessments of various agents and their effects. The course also includes theoretical and practical aspects of bio-assays, and an overview of case studies and of control measures. Lectures only.

BIOL 383 *Animal Physiology I* (3 credits)

Prerequisite: BIOL 225, 226, 227; CHEM 271. A study of basic cellular and physiological mech-

anisms in vertebrates. Topics discussed include regulation of animal internal environment, neuromuscular physiology, sensory mechanisms, and control of body movements. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 333 or PSYC 358 may not take this course for credit.

BIOL 385 Entomology (3 credits)

Prerequisite: BIOL 225; BIOL 226 previously or concurrently, BIOL 227 recommended. This course introduces the student to the variety and complexity of insect life. Basic classification is followed by a more detailed study of morphology and anatomy, together with some physiological considerations. Other topics such as adaptations for aquatic life and social behaviour are discussed. Laboratories begin with a field trip, the object of which is to observe and collect various insect species. The rest of the laboratory sessions complement the lectures. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 232 may not take this course for credit.

BIOL 386 Insect Behaviour and Physiology (3 credits)

Prerequisite: BIOL 225, 226. This course deals with insect physiology and behaviour. It emphasizes the relationships between structure and function of various insect parts. The lecture topics will include the following: introduction to insect behaviour, vision, gustation, olfaction, pheromones, hormones, light production, sound production and perception, social behaviour, diapause, migration, insect control, and co-evolution of insects and plants. Lectures only.

NOTE: Students who have received credit for BIOL 398D may not take this course for credit.

BIOL 387 Vertebrate Anatomy (3 credits)

Prerequisite: BIOL 225, 226, 227. Study of anatomical structures of a representative series of vertebrates from a comparative and evolutionary perspective, with some special emphasis on the mammals. In laboratory periods, representatives of selected classes of vertebrates are dissected. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 331 may not take this course for credit.

BIOL 398 Intermediate Topics in Biology (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

BIOL 433 Parasitology (3 credits)

Prerequisite: BIOL 225, 226, 227; 337 recommended. A survey of the parasitic groups of invertebrates, with special reference to human parasites. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 332 may not take this course for credit.

BIOL 435 Advanced Histology (3 credits)

Prerequisite: BIOL 335. An advanced comparative study of the vertebrate organ systems at the ultrastructural and histological level. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 336 may not take this course for credit.

BIOL 437 Invertebrate Functional Biology (3 credits)

Prerequisite: BIOL 337. This course will examine the ways in which various functions, including feeding, gas exchanges, osmoregulation, neural and chemical coordination, are accomplished in invertebrate animals. Each process will be examined in the context of its basic physiological and physical elements, then examined in a variety of invertebrate animals to illustrate how each accomplishes the particular function. Lectures only.

NOTE: Students who have received credit for BIOL 338 may not take this course for credit.

BIOL 441 Plant Biochemistry (3 credits)

Prerequisite: BIOL 367. Biochemical study of the natural constituents and secondary metabolites unique to plants. Their biosynthesis, biotransformations, and functions in plants, as well as their economic and pharmacologic importance are stressed. Lectures only.

BIOL 442 Perspectives in Plant Tissue Culture and Plant Biotechnology (3 credits)

Prerequisite: BIOL 346. This course looks at plant-growth regulators, nutritional requirements, and other factors necessary for in-vitro culturing of plant cells and tissues. The course also discusses methods available for nuclear transfers and the propagation of transformed plants. Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 443 Plant Molecular Genetics (3 credits)

Prerequisite: BIOL 367. This course analyses plant genome structure, mRNA population complexity, gene-cloning strategies, gene transfer in plants, gene regulation, and a survey of topics such as signal transduction, plant disease resistance, herbicide resistance, metabolic engineering, and environmental stress resistance. Innovative applications of molecular analysis and genetic engineering in plants have had a dramatic impact on our basic understanding of plant growth and development, on genetic improvements of commercial varieties of crop plants, and on novel applications such as the production of pharmaceutical compounds, plastics and mammalian antibodies in plants. Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 449 *Physiology and Metabolism of Higher Plants* (3 credits)

Prerequisite: A minimum of three credits chosen from BIOL 346, 350, 353, 367, 383. This course deals with the physiological and biochemical processes of higher plants, blending modern molecular approaches with traditional physiological and biochemical methods and environmental physiology to understand how plants work. Topics include the role of water and minerals in the normal development of plants, how carbon is fixed during photosynthesis, the utilization and metabolism of photosynthesis products, and the assimilation of nitrogen and sulphur. These processes are discussed in relation to the environmental factors which govern them. Lectures only.

NOTE: Students who have received credit for BIOL 349 may not take this course for credit.

BIOL 450 *Techniques in Ecology* (3 credits)

Prerequisite: BIOL 227, 322 or equivalent, and a minimum of six credits from BIOL 321, 350, 351, 353, 354. This course introduces students to a variety of techniques of experimental design, data collection, and quantitative analysis. Students participate in a series of modules, each of which presents experimental and analytical techniques appropriate for one area of modern research in ecology, behaviour, or evolution. Some modules require students to collect and subsequently analyse original data from field or laboratory settings. Modules and their contents may vary from year to year. Tutorials and laboratory.

BIOL 451 *Plant Field Ecology* (3 credits)

Prerequisite: BIOL 322 or equivalent, BIOL 353. This course is designed to give students practical experience working with plant communities. It is offered at a field station during the last two weeks of August, and residence is mandatory. Students learn to identify plant species occurring in field, forest, and mountain communities, with the aim of describing and understanding plant community patterns. Methods of sampling and statistical analysis of population and community data are discussed and applied. The course is a combination of formal lectures, organized field studies, and informal discussions. Students are required to hand in a series of written reports and a plant collection after the course has ended. *NOTE: Students who have received credit for BIOL 352 may not take this course for credit.*

BIOL 457 *Applied Ecology and Conservation Biology* (3 credits)

Prerequisite: A minimum of nine credits chosen from BIOL 321, 350, 351, 353, 354. This course applies principles of ecology at the individual, population, community and ecosystem level to identify and solve practical environmental problems. Topics include pollution, climate

change, farming, harvesting renewable resources, designing nature reserves and conserving biodiversity. Lectures and tutorials.

BIOL 458 *Decomposer Communities and Nutrient Cycling* (3 credits)

Prerequisite: BIOL 353. This course examines the role of the microbial community in the fundamental processes of decomposition and nutrient cycling. We discuss the role of microbes in the breakdown of organic molecules and the release and transformation of mineral elements. Emphasis is placed on the interactions between bacteria, fungi, and the microfauna in decomposition and on the role of interactions between plants and microbes in the maintenance of nutrient cycles. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 356 may not take this course for credit.

BIOL 459 *Aquatic Ecology* (3 credits)

Prerequisite: BIOL 322 or equivalent, BIOL 353. This course introduces the student to aquatic ecosystems. The first half of the course concentrates on the biological basis of primary and secondary productivity. The second half of the course explores the ecology of fishes at the individual, population, community, and ecosystem levels of analysis. Lectures, field trips, and laboratory.

NOTE: Students who have received credit for BIOL 355 or 431 may not take this course for credit.

BIOL 460 *Molecular Genetics* (3 credits)

Prerequisite: BIOL 367. Basic microbial and molecular genetics, including isolation and characterization of mutants, methods of mapping mutants, transposons, episomes, and recombinant DNA techniques. Lectures and conferences.

BIOL 461 *Advanced Genetics* (3 credits)

Prerequisite: BIOL 367. Directed readings and seminars in classical and contemporary genetics designed to expose the student to research literature and problems. Students probe in greater depth areas of particular interest in order to develop a critical sense and deepen an understanding of past and current work in this field. Seminars only.

BIOL 462 *Immunology* (3 credits)

Prerequisite: BIOL 266, 367. The role of the immune system in maintenance of body homeostasis will be presented with particular reference to cells and tissues of the immune system, their organization as well as their structural and functional relationships. Topics include: maturation and differentiation of B and T lymphocytes; structure and properties of antibodies; immune responses to antigens; genetic aspects of antibody synthesis; immunological considerations in AIDS, cancer, and autoimmune diseases. Lectures and seminars.

BIOL 464 *Advanced Cell Biology*
(3 credits)

Prerequisite: BIOL 266, 367. Lectures dealing with selected topics in mammalian cell biology. These include introduction to the elements of cell culture with reference to the growth and function of non-differentiated and differentiated cells, control of cell cycling under normal and abnormal states, mechanisms of peptide and steroid hormone action with emphasis on intracellular signalling pathways, the control of gene transcription and detailed analysis of the effect of host cell factors on virus replication. Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 465 *Biological Regulatory Mechanisms* (3 credits)

Prerequisite: BIOL 261; CHEM 271; or permission of the Department. The molecular basis of the control of metabolic pathways, with an emphasis on prokaryote systems. The course concentrates on the analysis of the rationale of experimentation used to elucidate these regulatory mechanisms. Lectures and conferences.

BIOL 466 *Advanced Laboratory in Molecular Biology* (3 credits)

Prerequisite: BIOL 367, 368. Theory and practice of modern experimental procedures of molecular biology, including use of restriction enzymes, gene cloning, hybridizations, DNA sequencing, site-directed mutagenesis, and the use of bacteria and phage in biotechnology. Laboratory and tutorials.

NOTE: Students who have received credit for CHEM 479 may not take this course for credit.

BIOL 468 *Gene Structure* (3 credits)

Prerequisite: BIOL 367. This course deals with gene regulation in eukaryotes. Topics covered include transcription, transcript processing, translation, and post-translational processes. Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 469 *DNA Repair* (3 credits)

Prerequisite: BIOL 367. This course deals with the chemical alterations arising spontaneously in DNA during semi-conservative replication and as a result of exposure to ionizing radiation, ultraviolet radiation, and genotoxic chemicals. The repair of DNA damage by various enzymatic processes in both prokaryotic and eukaryotic cells is discussed. Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 470 *Microbial Physiology* (3 credits)

Prerequisite: BIOL 225, 226; CHEM 271. Comparative biochemistry of prokaryotes — a

study of the biochemical activities underlying the life of micro-organisms. A description of the diverse biochemical adaptations used by micro-organisms to obtain energy and building materials from their various environments. Lectures and tutorials.

BIOL 471 *Mechanism of Protein Synthesis* (3 credits)

Prerequisite: BIOL 367. Cells synthesize many different proteins containing different sequences of amino acids. Synthesis of proteins is carried out by ribosomes (composed of proteins and RNA) and a variety of protein and RNA molecules that interact with the ribosome. The translation of the nucleotide sequence of a messenger RNA into the amino acid sequence of a protein involves over one hundred different proteins and RNA molecules. This course discusses current research on protein synthesis. Specific topics include the structure and function of ribosome and the other proteins and RNAs involved in translation, quality control in protein synthesis (translational accuracy), and the mechanisms of various types of programmed "errors" in translation. Lectures only.

NOTE: Students who have received credit for BIOL 498V may not take this course for credit.

BIOL 483 *Animal Physiology II* (3 credits)

Prerequisite: BIOL 383; BIOL 387 recommended. This course is a continuation of BIOL 383 and includes the study of mechanisms by which activities of major organ systems are coordinated and regulated in vertebrates, especially humans. Topics covered include blood, cardiovascular systems, respiration, water-electrolyte regulation, digestion, and metabolism. Lectures and laboratory.

NOTE: Students who have received credit for BIOL 384 may not take this course for credit.

BIOL 490 *Independent Study* (6 credits)

Prerequisite: Sixty (60) credits in an Honours or Specialization program in Biology, and permission of the Department. In this course, the student undertakes a special research project selected in consultation with, and conducted under, the supervision of a faculty member of the Department. The project is intended to develop the student's knowledge of standard scientific procedures, including methods of researching scientific literature, the planning and execution of experimental and analytical procedures, the writing of a formal report, and the presentation of a seminar on the project.

NOTE: Students may register in September or January for this course, but work must continue over two consecutive semesters.

BIOL 498 *Advanced Topics in Biology*
(3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.050 CHEMISTRY AND BIOCHEMISTRY

Faculty	<p><i>Chair</i> MARCUS F. LAWRENCE, Associate Professor</p> <p><i>Professor Emeritus</i> MARK DOUGHTY</p> <p><i>Professors</i> PETER H. BIRD JOHN A. CAPOBIANCO ANN M. ENGLISH MARY JUDITH KORNBLATT</p> <p><i>Associate Professors</i> GEORGE DENES PAUL JOYCE RAYMOND LE VAN MAO JUSTIN B. POWLOWSKI JOANNE TURNBULL</p> <p><i>Assistant Professors</i> CAMERON SKINNER DAVID JACK HEIDI M. MUCHALL GILLES PESLHERBE SEBASTIEN ROBIDOUX</p> <p><i>Adjunct Professors</i> THOMAS J. ADLEY MARY BALDWIN IRENA EKIEL BHUVAN PANT DOROTHY POCOCK ROBIN T.B. RYE OSWALD S. TEE</p>
Location	<p>Sir George Williams Campus Hall Building, Room: H 1139 (514) 848-3366</p>
Department Objectives	<p>Chemistry is the science that examines the structure of substances and the reactions to produce novel and useful products. Biochemistry is that part of chemistry which deals with chemical changes occurring in biologically relevant systems; i.e. changes taking place in living cells that are responsible for life processes.</p> <p>The mission of the Department is fourfold: (i) excellence in teaching and research in the fields of chemistry and biochemistry; (ii) develop and maintain strong undergraduate and graduate teaching programs; (iii) develop and maintain state-of-the-art quality research; and (iv) meet the high standards of the scientific and industrial communities. Our programs have strength in both the applied and the theoretical fields.</p>
Programs	<p><i>Students are responsible for satisfying their particular degree requirements.</i></p> <p><i>All students are advised to include a course in a computer language in their degree program.</i></p> <p><i>The Order of Chemists of Québec has fully accredited the curricula of i) Honours in Chemistry; ii) Honours in Biochemistry; iii) Specialization in Biochemistry; iv) Specialization in Chemistry.</i></p> <p><i>Upon satisfactory completion of any of the above-mentioned programs, a graduate is eligible for membership in the Order. A working knowledge of French is required.</i></p> <p><i>Students should note that CHEM 450 has a performance prerequisite and is essential for Honours programs. CHEM 419 has a performance prerequisite for the Specialization programs. Students who cannot meet these prerequisites will not be able to complete the programs but may complete a Major. For more details, students should consult with the Department.</i></p> <p><i>Courses that consist of both laboratories and lectures require that a satisfactory performance be obtained in each of the components for successful completion of the course.</i></p> <p><i>The superscript indicates credit value.</i></p> <div data-bbox="493 1556 894 1738"> <p>45 Core Component for Chemistry CHEM 217³, 218³, 221^{3*}, 222^{3*}, 234³, 235³, 241³, 242³, 271³, 312³, 324³, 325³, 333³, 341³, 393³</p> <p><i>*For cégep equivalents these courses must be replaced with an equivalent number of other Organic Chemistry credits.</i></p> </div> <div data-bbox="493 1759 894 1890"> <p>48 Core Component for Biochemistry BIOL 261³, 266³, 364³, 368³; CHEM 217³, 218³, 221^{3*}, 222^{3*}, 234³, 235³, 241³, 271³, 324³, 335³, 375³, 393³</p> <p><i>*For students entering with the cégep equivalents,</i></p> </div> <div data-bbox="943 1556 1367 1713"> <p><i>these credits must be replaced with an equivalent number of other Organic Chemistry credits (for students in the Specialization or Honours) or with an equivalent number of credits in Chemistry or related disciplines, as approved by the departmental adviser (for students in the Major).</i></p> </div> <div data-bbox="943 1734 1367 1890"> <p>BSc Honours in Chemistry An Honours in Chemistry program consists of completion of the requirements of the Specialization in Chemistry with the election of CHEM 450⁶ as the senior research project.</p> <p><i>NOTE: Students must meet the University</i></p> </div>

regulations concerning the Honours degree. Honours students are encouraged to attend departmental seminars.

60 BSc Honours in Chemistry

- 45 Core component for Chemistry
- 3 CHEM 495³
- 12 Additional credits in Chemistry which must include CHEM 450⁶

72 BSc Honours in Biochemistry

- 48 Core component for Biochemistry
- 3 CHEM 477³ or BIOL 466³
- 15 CHEM 312³, 325³, 450⁶; BIOL 367³
- 6 Credits of 400-level courses in the Biochemistry area (CHEM 470³, 471³, 472³, 475³, 478³, 481³, and when appropriate, CHEM 498³); three credits may be replaced by a 400-level course in Cell and Molecular Biology (BIOL 441³, 461³, 462³, 464³, 465³, 468³, 469³, 470³, and when appropriate, BIOL 498³).

NOTE: Students must meet the University regulations concerning the Honours degree. Honours students in second year and beyond are encouraged to attend departmental seminars.

60 BSc Specialization in Chemistry

- 45 Core component for Chemistry
- 3 CHEM 495³
- 12 Additional credits in Chemistry, which must include *CHEM 419⁶

**With departmental permission, the student may substitute CHEM 450⁶ for CHEM 419⁶.*

69 BSc Specialization in Biochemistry

- 48 Core component for Biochemistry
- 15 CHEM 312³, 325³, 477³; BIOL 367³, 466³

- 6 Credits of 400-level courses in the Biochemistry area (CHEM 470³, 471³, 472³, 475³, 478³, 481³, and when appropriate, CHEM 498³); three credits may be replaced by a 400-level course in Cell and Molecular Biology (BIOL 441³, 461³, 462³, 464³, 465³, 468³, 469³, 470³, and when appropriate, BIOL 498³).

45 BSc Major in Chemistry

- 45 Core component for Chemistry Substitution of courses from within the Core program by other courses in Chemistry or related disciplines (Mathematics, Physics, Biology, Geology) up to a maximum of nine credits, will be accepted, if previously approved by a departmental program adviser. It is expected that such substitutions will be in accord with the overall program of study being followed by the student.

48 BSc Major in Biochemistry

- 48 Core component for Biochemistry
- *For students with cégep equivalents, these may be replaced by an equivalent number of credits in Chemistry or related disciplines, as approved by the departmental adviser.*

24 Minor in Chemistry

- 24 Chosen from the Department's offerings, with due regard to prerequisites, such that the courses chosen form a coherent pattern which complements the student's other areas of study. The course pattern chosen must have been previously approved by a departmental program adviser.

*Chemistry and
Biochemistry
Co-operative
Program*

Co-Directors
ANN M. ENGLISH, *Professor*
SEBASTIEN ROBIDOUX, *Assistant Professor*

The Chemistry and Biochemistry Co-operative program is offered to students who are enrolled in the BSc Honours or Specialization in Chemistry and Biochemistry. Students interested in applying for the Chemistry and Biochemistry co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular program, but six Study terms are interspersed with four Work terms.

Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education, in order to continue their studies in the co-op format.

Liaison between the student, the employers and the Institute for Co-operative Education is provided by the Chemistry and Biochemistry co-op committee, which includes the student's advisers.

Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

Courses

A student may be exempted from one or more of the introductory courses, on the basis of work done at the cégep level. Where exemptions are given, replacement courses must be chosen with the approval of a department adviser. In the case of certain programs approved by the Order of Chemists of Québec, the courses must be replaced with an equivalent number of credits in the same sub-discipline as the exemptions.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

CHEM 205 General Chemistry I (3 credits)
Stoichiometry, states of matter, atomic structure, electron structure of atoms, the periodic table, periodic properties, bonding, solids. Lectures and laboratory.

NOTE: This course presumes a good grounding in secondary school mathematics. Students lacking such grounding or non-science students seeking only an awareness of chemistry are advised to enrol in CHEM 208³.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

CHEM 206 General Chemistry II (3 credits)
Prerequisite: CHEM 205. Thermochemistry, solutions and their properties, equilibrium, ionic equilibrium, pH, buffers, kinetics, reaction mechanisms, other selected topics related to biochemistry, biology, and engineering. Lectures and laboratory.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

CHEM 208 Chemistry in Our Lives
(3 credits)

This course is designed as an introduction to chemistry for non-science students. It concentrates on establishing the chemical concepts and vocabulary necessary to understand the many roles chemistry plays in people's daily lives. Issues to be presented will range from design and testing of drugs to protection of the ozone layer. The chemical phenomena, methodology, and theory will be presented as needed to understand the various issues covered in the course. Lectures only.

NOTE: This course is not a prerequisite for any Chemistry course. This course may not be taken for credit by science students.

CHEM 209 Discovering Biotechnology
(3 credits)

The course begins with an exploration of the roles of genes and proteins in life processes. It then proceeds to an examination of the basic scientific principles behind manipulation of biological molecules to produce desired changes. Students are introduced to the specific applications of the technology to medicine, agriculture, and the environment. Economic and ethical issues raised by biotechnology are also examined.

NOTE: This course is intended for non-scientists, and may not be taken for credit by Biochemistry or Biology students.

CHEM 212 Analytical Chemistry for Biologists (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226; cégep Math 203 or MATH 205. Chemical equilibria and titrations, treatment of analytical data, introduction

to spectroscopy. Lectures and laboratory.

NOTE: This course may not be taken for credit by students registered in a Chemistry or Biochemistry program.

CHEM 217 Introductory Analytical Chemistry I (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226; cégep Mathematics 103 or MATH 203; cégep Mathematics 203 or MATH 205. Precipitation methods and solubility products; activity, chemical equilibria and titration curves of neutralization and complexation systems; treatment of analytical data. Lectures and laboratory.

CHEM 218 Introductory Analytical Chemistry II (3 credits)

Prerequisite: CHEM 217. Chemical equilibria and titration curves of oxidation-reduction, precipitation, and non-aqueous systems; potentiometry and potentiometric titrations; introduction to spectroscopy with emphasis on molecular and atomic absorption spectroscopy, fluorescence spectroscopy. Lectures and laboratory.

CHEM 221 Introductory Organic Chemistry I (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206. Basic aspects of orbitals and their role in covalent bonding; delocalization of electrons. Alkanes: structure, nomenclature, isomerism, reactions. Introductory stereochemistry: enantiomers, diastereomers, conformers, Fischer and Newman projections, specification of chirality, E/Z isomerism. Conformations of cyclic compounds. Alkylhalides: S_N1 ; S_N2 ; E1; E2 reaction mechanisms. Free-radical reactions, organometallic compounds. Chemistry of alcohols, ethers, and related compounds. Chemistry of alkenes, alkynes, and dienes. Lectures and laboratory.

CHEM 222 Introductory Organic Chemistry II (3 credits)

Prerequisite: CHEM 221, or one semester cégep Organic Chemistry. Introduction to the use of IR and NMR spectroscopy for the identification of simple organic compounds. Benzene and aromatic compounds: aromaticity, electrophilic aromatic substitution, nucleophilic aromatic substitution, substituent effects. Chemistry of aldehydes and ketones: nucleophilic addition, oxidation, reduction, and condensation reactions, tautomerism. Chemistry of carboxylic acids and their derivatives: amines: basicity, reactions. Lectures and laboratory.

CHEM 234 Physical Chemistry I: Thermodynamics (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226; cégep Mathematics 103 or MATH 203;

cégep Mathematics 203 or MATH 205. The properties of real gases; fugacities; first, second and third laws of thermodynamics; the Phase Rule; one- and two-component systems; real solutions, and partial molal properties. Lectures, problem assignments, and assigned readings.
NOTE: Students who have received credit for CHEM 231 and 232 or 332 or for this topic under a CHEM 298 number may not take this course for credit.

CHEM 235 *Physical Chemistry: Kinetics of Chemical Reactions* (3 credits)

Prerequisite: CHEM 234; Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226; cégep Mathematics 103 or MATH 203; cégep Mathematics 203 or MATH 205. Mathematical treatment of experimental results; theories of reaction rates; unimolecular reactions; the steady-state approximation; factors influencing rates of reactions in solution; acid-base catalysis; catalysis by enzymes and the Michaelis-Menten mechanism; free-radical reactions; photochemical reactions; experimental methods and techniques. Lectures and laboratory.

NOTE: Students who have received credit for CHEM 331 or for this topic under a CHEM 298 number may not take this course for credit.

CHEM 241 *Inorganic Chemistry I: Introduction to Periodicity and Valence Theory* (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226; cégep Mathematics 103 or MATH 203; cégep Mathematics 203 or MATH 205. The structure of the atom; the periodic table; properties of atoms, covalent bonding treatments including Lewis theory, valence shell electron pair repulsion theory of structure, valence bond and molecular orbital theory. Crystal field theory applied to the structure and properties of transition metal complexes. Bonding theories of metallic materials and semi-conductors. Lectures and laboratory.

CHEM 242 *Inorganic Chemistry II: The Chemistry of the Main Group Elements* (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226; cégep Mathematics 103 or MATH 203; cégep Mathematics 203 or MATH 205. A survey of the properties and reactions of: hydrogen; Group 1, lithium to cesium; and Group 2, beryllium to radium; including the theory of ionic bonding and structure. The descriptive chemistry of Group 13, boron to thallium; Group 14, carbon to lead; Group 15, nitrogen to bismuth; Group 16, sulphur to polonium; Group 17, the halogens; and Group 18, the chemistry of the noble gases. Lectures and laboratory.

CHEM 271 *Biochemistry I* (3 credits)

Prerequisite: CHEM 221; CHEM 222 previously or concurrently. An introduction to the essentials of biochemistry: protein structure, enzymology,

carbohydrate metabolism, electron transport, integration and regulation of metabolism. Lectures, tutorials and laboratory.

NOTE: Students who have received credit for CHEM 371 or CHEM 372 or CHEM 373 may not take this course for credit.

CHEM 298 *Selected Topics in Chemistry* (3 credits)

CHEM 299 *Selected Topics in Chemistry* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CHEM 312 *Intermediate Analytical Chemistry* (3 credits)

Prerequisite: CHEM 217; CHEM 218. A continuation of CHEM 217 and 218, with emphasis on instrumental methods of analysis. Emission spectroscopy; X-ray spectroscopy; voltammetry and polarography; amperometric titrations; coulometry and coulometric titrations, conductometry; chromatography with particular emphasis on gas chromatography, and high performance liquid chromatography. Laboratory is taken concurrently and provides experience in analytical techniques described in lectures. Lectures and laboratory.

NOTE: Students who have received credit for any of CHEM 310, CHEM 314, CHEM 315, or CHEM 319, may not take this course for credit.

CHEM 324 *Organic Chemistry III: Organic Reactions* (3 credits)

Prerequisite: CHEM 222, or equivalent; CHEM 235 previously or concurrently. A mechanistic survey of reactions of major synthetic utility. Determination of reaction mechanisms. Importance of reactive intermediates: carbocations, carbanions, radicals, and carbenes. Lectures and laboratory.

NOTE: Students who have received credit for CHEM 322 may not take this course for credit.

CHEM 325 *Organic Chemistry IV: Organic Structure and Stereochemistry* (3 credits)

Prerequisite: CHEM 222, or equivalent. Organic structure and stereochemistry including the relationship of stereochemistry to physical properties and chemical reactivity. Determination of organic structure and stereochemistry by chemical and spectroscopic means. Identification of organic compounds (principally in the laboratory section). Lectures and laboratory.

NOTE: Students who have received credit for CHEM 321 may not take this course for credit.

CHEM 326 *Natural Products* (3 credits)

Prerequisite: CHEM 324 previously or concurrently. The structures, mechanisms of action, and biosynthetic origins of biologically important compounds such as fatty acids, polyketides, terpenes, steroids, alkaloids, and beta-lactam

antibiotics are discussed. The role of traditional organic chemistry in the development of modern biochemistry and biotechnology is illustrated with examples from medicine and agriculture. Lectures only.

CHEM 327 *Organic Chemistry of Polymers* (3 credits)

Prerequisite: CHEM 222, or equivalent. Introduction to the fundamental aspects of polymers and polymerization. Methods of preparation, reaction mechanisms of polymer synthesis including condensation polymerization; addition polymerization: free radical, anionic, cationic; Ziegler-Natta (heterogeneous) polymerization. Lectures and problem sessions.

CHEM 333 *Introduction to Quantum Theory* (3 credits)

Prerequisite: CHEM 234. The course introduces students to the concept of quantum mechanics and the electronic structure of atoms and molecules. Topics include the origins and postulates of quantum theory, the Schrodinger equation and applications to simple systems such as the harmonic oscillator, rigid rotor and the hydrogen atom. The course looks at the quantum mechanical treatment of the chemical bond: molecular orbital theory, the description of electronic energy levels of simple molecules, the population of these levels and associated transition probabilities. Lectures only.

NOTE: Students who have received credit for CHEM 233 may not take this course for credit.

CHEM 334 *Physical Chemistry: Laboratory* (3 credits)

Prerequisite: CHEM 235. A series of experiments illustrating modern techniques for the examination of solids, liquids, and gases. Some experiments may include the automated collection and computerized analysis of data. Laboratory only.

CHEM 335 *Biophysical Chemistry* (3 credits)

Prerequisite: CHEM 235, 271. This course examines physical techniques used to study the structure of biological macromolecules such as absorption, fluorescence and circular dichroism spectroscopy, mass spectrometry, x-ray crystallography, NMR spectroscopy, calorimetric and relaxation techniques. Lectures and laboratory.

CHEM 341 *Inorganic Chemistry III: The Transition Metals* (3 credits)

Prerequisite: CHEM 217; CHEM 218; CHEM 241; CHEM 242. Theories of bonding in transition metal complexes, including ligand field theory, applied to structure, physical properties, and reactivity of transition metal complexes: organometallic chemistry and catalysis. Metals in biological systems. Lectures and laboratory.

CHEM 375 *Biochemistry II* (3 credits)

Prerequisite: CHEM 222; CHEM 271; CHEM 217 or CHEM 212. A survey of selected pathways in

intermediary metabolism, including their regulation and physiological significance, lipid, amino acid and nucleoside metabolism, cholesterol biosynthesis, urea cycle and the biochemistry of protein synthesis. Lectures and laboratory.

CHEM 393 *Spectroscopy and Structure of Organic Compounds* (3 credits)

Prerequisite: CHEM 218, 222. This course examines the identification of organic compounds using methods based on electronic, vibrational, nuclear magnetic resonance and mass spectroscopies. In each case, there is an introduction to the principles of the spectroscopy and a discussion of how its spectra vary with structure. Particular emphasis is placed upon the UV-visible spectra of conjugated molecules; the identification of functional groups by IR spectroscopy; the use of NMR spectroscopy, including 2D methods, for the determination of stereochemistry; and the use of mass spectrometry for ascertaining molecular constitution. The use of computer simulation and information retrieval for structure determination is introduced. Lectures and laboratory.

NOTE: Students who have received credit for CHEM 328 may not take this course for credit.

CHEM 398 *Selected Topics in Chemistry* (3 credits)

CHEM 399 *Selected Topics in Chemistry* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CHEM 415 *Analytical Separations* (3 credits)

Prerequisite: CHEM 312. High performance liquid separations on an analytical (non-preparative) scale are surveyed. Fundamental separation mechanisms and application of the techniques are discussed. Emphasis is placed on capillary electrophoretic separations of biologically relevant analytes which include peptides, proteins and nucleic acids. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 419 *Independent Study and Practicum* (6 credits)

Prerequisite: Must have completed the 45-credit Core program, or equivalent, with a GPA of 2.00 (C) or better. In collaboration with and under the direction of a member of Faculty, the student carries out independent study and practical work on a problem chosen from the student's area of concentration. The student submits a written report on the results of the work and the report is scrutinized by a committee of members of the Department.

NOTE: During the academic session before the one in which this project is to be undertaken, the student must have obtained the consent of

the Department, by consultation with the CHEM 419 coordinator, and must have also been accepted by a faculty supervisor. Independent study and practical work.

CHEM 421 Physical Organic Chemistry
(3 credits)

Prerequisite: CHEM 324 or CHEM 325; CHEM 235. Determination of organic reaction mechanisms using kinetics, activation parameters, acid-base catalysis, Bronsted catalysis law, solvent effects, medium effects, isotope effects, substituent effects, and linear free energy relationships. Lectures only.

CHEM 424 Organic Synthesis (3 credits)
Prerequisite: CHEM 324. This course is concerned with synthetic strategy and design. Applications of modern synthetic methods and reagents are exemplified by syntheses of natural products, peptides, nucleic acids, and novel chemotherapeutic agents. Lectures only.
NOTE: Students who have received credit for CHEM 422 may not take this course for credit.

CHEM 442 Physical Methods in Inorganic Chemistry (3 credits)

Prerequisite: CHEM 341; CHEM 393 previously or concurrently. Introduction to symmetry and the character tables. Diffraction methods, X-ray, ESCA, UV-Visible, ORD and CD, EPR, Mössbauer, NQR, NMR, IR, and Raman. Lectures only.

CHEM 445 Industrial Catalysis (3 credits)
Prerequisite: CHEM 234, 235. Basic and recent concepts in catalysis are described with particular emphasis on heterogeneous catalysis. The technical, economic and environmental aspects of industrial catalysis are covered. The processes to be studied are chosen from the petroleum industry, the natural gas and coal processing industry, and the production of thermoplastics and synthetic fibres. The course ends with a rapid survey of problems associated with the treatment of industrial pollutants and with catalytic converters. Lectures only.
NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 450 Research Project and Thesis
(6 credits)

Prerequisite: Sixty credits including the 45-credit Core program, or equivalent and enrolment in Honours in Chemistry; or written permission of the Department. By departmental decision, such permission is only given if the student has a GPA of 3.00 or better, for all courses in this program. The student works on a research project in the student's area of concentration, selected in consultation with and conducted under the supervision of a faculty member of the Department, and writes a thesis on the results. The project is also the subject of a seminar before the Department.
NOTE: During the academic session before the

one in which this project is to be undertaken, the student must have obtained the consent of the Department, by consultation with the CHEM 450 coordinator, and must have also been accepted by a faculty supervisor.

CHEM 470 Environmental Biochemistry
(3 credits)

Prerequisite: CHEM 271, 375; BIOL 367; or permission of the Department. This course examines the biochemical effects of environmental stresses on organisms, and adaptations that allow organisms to face these stresses. Emphasis is placed on biochemical responses to toxic compounds such as aromatics, halogenated aliphatics, drugs, and heavy metals. Other topics may include adaptations to stresses such as temperature extremes, pathogens, and ionizing radiation. Applications to related biotechnological processes are also considered.
NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 471 Enzyme Kinetics and Mechanism (3 credits)

Prerequisite: CHEM 271. Steady-state kinetics, including the use of initial velocity studies and product inhibition to establish a kinetic mechanism; nonsteady-state kinetics, isotope effects, energy of activation, etc; detailed mechanisms of selected enzymes. Lectures only.

CHEM 472 Chemical Toxicology (3 credits)
Prerequisite: CHEM 271. Introduction to the general principles of toxicology with emphasis on the toxic effects of chemicals in humans. Dose-response relationship, types and routes of exposure, absorption and disposition of toxic substances, toxicokinetics, types of toxic response, and factors affecting toxic response. Toxicity testing, risk assessment, and interpretation of toxicological data. Lectures only.
NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 475 Protein Engineering and Design (3 credits)

This course will examine the principles behind protein design, how techniques of protein engineering are used, and the methods used to assess the properties of the proteins. Examples will include studies of protein stability and of structure-function relationships, design of catalytic antibodies and applications to drug design. Lectures only.
NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 477 Advanced Laboratory in Biochemistry (3 credits)

Prerequisite: CHEM 375; BIOL 368. Theory and practice of techniques in enzymology and protein chemistry, including steady-state and

stopped-flow enzyme kinetics, ligand binding, immunological techniques, computer modelling, identification of groups at the active site. Lectures and laboratory.

CHEM 478 *Hormone Biochemistry*
(3 credits)

Prerequisite: CHEM 375. This course deals with an in-depth study of the vertebrate hormones and involves a study of the precise chemical structure and properties of each hormone, its biosynthesis and mode of secretion from the cell. The circulating form of the hormone is examined, as well as the nature of the hormone receptor. The cellular mechanism of action and the relationship of the hormone's action to the intact animal are investigated. Lectures only.

CHEM 481 *Bioinorganic Chemistry*
(3 credits)

Prerequisite: CHEM 271; CHEM 241. Role of metals in biochemical systems. Essential trace elements, zinc enzymes, oxygen transport and storage, metalloproteins and biological electron transfer, structure-function relationships in heme enzymes, nitrogen fixation; model compounds for metalloproteins and metalloenzymes. Lectures only.

CHEM 493 *Magnetic Resonance Spectroscopy* (3 credits)

Prerequisite: CHEM 222, or equivalent. This course is designed to provide the background in magnetic resonance theory necessary to understand modern high-resolution NMR experiments and instrumentation. The basic theory in the introductory section also applies to electron spin resonance (ESR). Relaxation and through-bond and through-space interactions, and experiments to investigate them are considered. Spin

manipulations and behaviour in multiple-pulse, Fourier transform NMR techniques used for common spectral editing and two-dimensional experiments are discussed. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 494 *Mass Spectrometry* (3 credits)

Prerequisite: CHEM 235. Production and interpretation of mass spectra. Topics include: ionization methods (electron impact, chemical ionization and fast-atom bombardment); interpretation of mass spectra; introduction to quantitative analysis by mass spectrometry. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 495 *Modern Spectroscopy*
(3 credits)

Prerequisite: CHEM 333. This course demonstrates how quantum theory applies to the measurement of absorption and emission spectra of atoms and molecules. The course examines rotational, vibrational, and electronic spectroscopy. Photoelectron and related spectroscopies. Lasers and laser spectroscopy. Lectures and laboratory.

CHEM 498 *Advanced Topics in Chemistry*
(3 credits)

CHEM 499 *Advanced Topics in Chemistry*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

<p><i>Faculty</i></p>	<p><i>Chair</i> CATHERINE VALLEJO, Associate Professor (Spanish)</p> <p><i>Professor</i> LIONEL J. SANDERS (Classics)</p> <p><i>Associate Professors</i> M. CATHERINE BOLTON (Classics) ANTHONY COSTANZO (Italian) HELMUT F. FAMIRA (German) MARK HALE (Linguistics)</p> <p>FILIPPO SALVATORE (Italian) HERFRIED SCHEER (German) ANNETTE TEFFETELLER (Linguistics) BRUNO VILLATA (Italian)</p> <p><i>Assistant Professors</i> JANE E. FRANCIS (Classics) JOSÉ ANTONIO GIMÉNEZ-MICÓ (Spanish) BRADLEY J. NELSON (Spanish) CHARLES REISS (Linguistics) LADY ROJAS-TREMPE (Spanish)</p>		
<p><i>Location</i></p>	<p>Sir George Williams Campus Hall Building, Room: H 663 (514) 848-2310</p>		
<p><i>Department Objectives</i></p>	<p>Classics programs have two related aims: first, to provide a broad and stimulating program to students interested in exploring their cultural roots; secondly, to train specialists in reading and interpreting texts in ancient Greek and Latin.</p> <p>In addition, through its commitment to teaching and research, the Department seeks to provide a stimulating intellectual milieu for learning languages and linguistics skills and theory, and for the humanistic and analytic study of literature.</p>		
<p><i>Programs</i></p>	<p>The Department of Classics, Modern Languages and Linguistics offers undergraduate programs leading to the BA degree in Classics, German, Italian, Spanish, and Linguistics.</p> <p><i>Students are responsible for satisfying their particular degree requirements.</i> <i>The superscript indicates credit value.</i> <i>All these programs can normally be completed within the regular three-year university sessions.</i></p> <table> <tr> <td data-bbox="454 1197 941 1890"> <p>60 BA Honours in Classics 36 Honours Core consisting of: 9 Chosen from CLAS 211³, 212³, 320³, 330³ 6 CLAS 280⁶ or 290⁶ 6 CLAS 381³ and 382³, or 391³ and 392³ 3 Chosen from CLAS 230³, 240³, 242³, 341³, 343³ 3 CLAS 261³ or 262³ 3 Chosen from CLAS 266³, 267³, 353³, 364³, 365³, 369³ 6 CLAS 450³, 451³</p> <p><i>Concentration in Classical Languages and Literature</i> 36 Honours Core (see above) 6 CLAS 280⁶ or 290⁶ 6 CLAS 381³ and 382³, or 391³ and 392³ 6 CLAS 410³ and 411³, or 420³ and 421³ 6 LING 330⁶, 431⁶, or other Linguistics courses chosen in consultation with the Department</p> <p><i>Concentration in Classical Civilization</i> 36 Honours Core (see above) 9 Chosen from CLAS 230³, 240³, 242³, 341³, 343³</p> </td><td data-bbox="941 1197 1362 1890"> <p>6 Chosen from CLAS 266³, 364³, 365³, 369³, 370³ 3 Chosen from CLAS 261³, 262³, 353³ 6 Credits in either Classics or another subject chosen in consultation with the Department</p> <p>42 BA Major in Classics 18 Major Core consisting of: 9 Chosen from CLAS 211³, 212³, 320³, 330³ 3 Chosen from CLAS 230³, 240³, 242³, 341³, 343³ 3 CLAS 261³ or 262³ 3 Chosen from CLAS 266³, 267³, 353³, 364³, 365³, 369³</p> <p><i>Concentration in Classical Languages and Literature</i> 18 Major Core (see above) 6 CLAS 280⁶ or 290⁶ 6 CLAS 381³ and 382³, or 391³ and 392³ 6 CLAS 410³ and 411³, or 420³ and 421³ 6 CLAS 280⁶ or 290⁶, or other Linguistics courses chosen in consultation with the Department</p> </td></tr> </table>	<p>60 BA Honours in Classics 36 Honours Core consisting of: 9 Chosen from CLAS 211³, 212³, 320³, 330³ 6 CLAS 280⁶ or 290⁶ 6 CLAS 381³ and 382³, or 391³ and 392³ 3 Chosen from CLAS 230³, 240³, 242³, 341³, 343³ 3 CLAS 261³ or 262³ 3 Chosen from CLAS 266³, 267³, 353³, 364³, 365³, 369³ 6 CLAS 450³, 451³</p> <p><i>Concentration in Classical Languages and Literature</i> 36 Honours Core (see above) 6 CLAS 280⁶ or 290⁶ 6 CLAS 381³ and 382³, or 391³ and 392³ 6 CLAS 410³ and 411³, or 420³ and 421³ 6 LING 330⁶, 431⁶, or other Linguistics courses chosen in consultation with the Department</p> <p><i>Concentration in Classical Civilization</i> 36 Honours Core (see above) 9 Chosen from CLAS 230³, 240³, 242³, 341³, 343³</p>	<p>6 Chosen from CLAS 266³, 364³, 365³, 369³, 370³ 3 Chosen from CLAS 261³, 262³, 353³ 6 Credits in either Classics or another subject chosen in consultation with the Department</p> <p>42 BA Major in Classics 18 Major Core consisting of: 9 Chosen from CLAS 211³, 212³, 320³, 330³ 3 Chosen from CLAS 230³, 240³, 242³, 341³, 343³ 3 CLAS 261³ or 262³ 3 Chosen from CLAS 266³, 267³, 353³, 364³, 365³, 369³</p> <p><i>Concentration in Classical Languages and Literature</i> 18 Major Core (see above) 6 CLAS 280⁶ or 290⁶ 6 CLAS 381³ and 382³, or 391³ and 392³ 6 CLAS 410³ and 411³, or 420³ and 421³ 6 CLAS 280⁶ or 290⁶, or other Linguistics courses chosen in consultation with the Department</p>
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- Concentration in Classical Civilization*
- 18 Major Core (see above)
- 9 Chosen from CLAS 230³, 240³, 242³, 341³, 343³
- 6 Chosen from CLAS 266³, 267³, 364³, 365³, 369³, 370³
- 3 Chosen from CLAS 261³, 262³, 353³
- 6 Credits in either Classics or another subject chosen in consultation with the Department

24 Minor in Classical Languages and Literature

- 12 CLAS 211³, 212³, 320³, 330³
- 12 Chosen from 280⁶, 290⁶, 381³, 382³, 391³, 392³

24 Minor in Classical Civilization

- 6 Chosen from CLAS 211³, 212³, 320³, 330³
- 6 Chosen from CLAS 230³, 240³, 242³, 341³, 343³
- 12 Chosen from CLAS 261³, 262³, 266³, 267³, 280⁶, 290⁶, 353³

24 Minor in Classical Archaeology

- 3 CLAS 266³
- 6 Chosen from CLAS 230³, 240³, 242³, 341³, 343³
- 9 Chosen from CLAS 267³, 364³, 365³, 369³, 370³
- 6 Credits in either Classics or another subject chosen in consultation with the Department

60 BA Honours in German

- 12 GERM 240⁶, or 241³ and 242³; 256³, 257³
- 24 GERM 271³, 301³, 302³, 306³, 307³, 308³, 365³, 366³
- 21 Credits chosen from 400-level courses in German, of which at least six credits must be from GERM 405³, 406³, 461³, 462³
- 3 GERM 490³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

60 BA Honours in Italian

- 6 ITAL 240⁶, or ITAL 241³ and 242³, or ITAL 253³ and 254³
- 12 ITAL 301³, 302³, 310³, 311³
- 42 Credits in an approved sequence chosen from any of the following: ITAL 256³, 257³, 306³, 307³, 365³, 366³, 398³, 399⁶, 410³, 415³, 416³, 420³, 421³, 425³, 430³, 432³, 433³, 435³, 436³, 437³, 439³, 442³, 443³, 445³, 446³, 461³, 462³, 480³, 481³, 482³, 483³, 490³, 498³, 499⁶

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

60 BA Honours in Spanish

- 6 SPAN 240⁶, or 241³ and 242³
- 12 SPAN 301³, 302³, 304³, 403³

- 3 SPAN 362³, 363³, 365³
- 3 SPAN 490³ (Honours Essay Tutorial)
- 36 Credits in an approved sequence chosen from any of the following: SPAN 310³, 311³, 320³, 321³, 362³ or 363³, 365³, 398³, 399⁶, 406³, 411³, 412³, 416³, 417³, 420³, 421³, 422³, 423³, 424³, 430³, 441³, 442³, 450³, 461³, 498³, 499⁶

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

60 BA Specialization in Spanish

- 6 SPAN 240⁶, or 241³ and 242³
- 6 SPAN 256³, 257³
- 21 SPAN 301³, 302³, 306³, 307³, 362³ or 363³, 365³, 370³
- 9 SPAN 401³, 461³, 464³
- 18 Credits chosen from: SPAN 310³, 311³, 320³, 321³, 362³ or 363³, 398³, 498³; LING 200⁶, 341³, or from courses in Hispanic literature at the 400 level, chosen in consultation with the Department.

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

42 BA Major in German

- 12 GERM 240⁶, or 241³ and 242³; 256³, 257³
- 15 Credits chosen from GERM 271³, 301³, 302³, 306³, 307³, 308³, 365³, 366³
- 15 Credits chosen from 400-level courses in German, of which at least six credits must be from GERM 405³, 406³, 461³, 462³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

42 BA Major in Italian

- 6 ITAL 240⁶, or ITAL 241³ and 242³, or ITAL 253³ and 254³
- 12 ITAL 301³, 302³, 310³, 311³
- 24 Credits from Italian courses numbered 256 and higher in a sequence approved by the Department.

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

42 BA Major in Spanish – Literature

- 6 SPAN 240⁶, or 241³ and 242³
- 9 SPAN 301³, 302³, 304³
- 3 SPAN 362³, 363³, 365³
- 24 Credits in approved sequence chosen from any of the following: SPAN 310³, 311³, 320³, 321³, 398³, 399⁶, 403³, 406³, 411³, 412³, 416³, 417³, 420³, 421³, 422³, 423³, 424³, 430³, 441³, 442³, 450³, 461³, 498³, 499⁶

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

42 BA Major in Spanish – Language

- 6 SPAN 240⁶, or 241³ and 242³
- 6 SPAN 256³, 257³
- 9 SPAN 301³, 302³, 370³
- 12 SPAN 362³ or 363³, 401³, 461³, 464³
- 9 Credits in approved sequence chosen from any of the following:
SPAN 306³, 307³, 310³, 311³, 320³, 321³,
362³ or 363³, 365³; LING 200⁶, 341³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

30 Minor in German

- 30 Credits in German of which at least 12 credits are to be chosen from GERM 301³ and above.

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

30 Minor in Italian

- 30 Credits in Italian of which at least 18 credits must be chosen from ITAL 301 and above.

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

30 Minor in Spanish

- 30 Credits in Spanish chosen in consultation with the Department

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

60 BA Honours in Linguistics

A student entering an Honours program in Linguistics will normally take the following courses:

- 18 LING 200⁶, 312⁶, 372³, 373³
- 18 LING 400³, 401³, 421⁶, 431⁶
- 12 LING credits chosen at the 300 and 400 level
- 12 LING credits, or 12 credits chosen in consultation with the Department from the following: Latin, Greek, Russian, German, Spanish, Italian, French, English, Portuguese, TESL, Sociology, Psychology, Philosophy

42 BA Major in Linguistics

- 15 LING 200⁶, 312⁶, 372³
- 21 LING credits chosen in consultation with the Department at the 300 and 400 level
- 6 Credits in either Linguistics or another subject chosen in consultation with the Department

30 Minor in Linguistics

- 6 LING 200⁶
- 24 Credits in Linguistics

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Classics**CLAS 211 Greek Literature** (3 credits)

An introduction to the literature of ancient Greece, this course focuses on Homer and the epic cycle, the Homeric hymns, Hesiod and lyric poetry, tragedy and comedy. The texts are read in English translation.

CLAS 212 Roman Literature (3 credits)

An introduction to the major authors of the Roman world, this course focuses on Catullus, Virgil, Horace, Ovid and Lucretius; works of the dramatists, orators and satirists may also be included. The texts are read in English translation.

CLAS 230 (also listed as HIST 219) Ancient Near East (3 credits)

A political, social, economic, and intellectual history of the ancient Near East, this course surveys the period from the origins of civilization in the middle of the fourth millennium to Alexander the Great's conquest of the Persian Empire in the latter part of the fourth century B.C.
NOTE: Students who have received credit for HIST 219 may not take this course for credit.

CLAS 240 (also listed as HIST 223) Greek History from the Bronze Age to Alexander (3 credits)

This course offers a political, social, economic, and cultural history of Greece from the Minoan-Mycenaean period in the second millennium to the end of Classical Greek civilization in the fourth century B.C., with special emphasis placed upon Athens.

NOTE: Students who have received credit for HIST 223 may not take this course for credit.

CLAS 242 (also listed as HIST 225) History of the Roman Republic (3 credits)

This course offers a political, social, economic, and cultural history of Rome from the city's origins to the establishment of the Roman Empire under the Emperor Augustus.

NOTE: Students who have received credit for HIST 225 may not take this course for credit.

CLAS 261 Greek Mythology (3 credits)

A survey of the myths of ancient Greece and their characters — deities, heroes, mortals and monsters, this course examines the significance

of the myths within their own time and their relevance for the modern world. Both literary and visual sources are used.

CLAS 262 *Mythology of the Ancient Mediterranean* (3 credits)

An examination of the common mythological themes of the ancient Mediterranean, this course focuses on the events, the characters, and the significance of recurrent elements as found in the myths of Mesopotamia, Egypt, Greece, and Rome.

CLAS 266 *An Introduction to Classical Archaeology* (3 credits)

This course provides a general overview of the material remains of ancient Greece from the Bronze Age to the Hellenistic period. It addresses the function, context, dating, and meaning of artifacts, as well as methods of analysis.

CLAS 267 *The Archaeology of the Greek Bronze Age* (3 credits)

The Bronze Age in Mainland Greece, Crete, and the Greek Islands.

CLAS 280 *Introductory Ancient Greek* (6 credits)

The fundamentals of Greek grammar are presented in a course designed to enable the student to read the ancient authors as soon as possible.

CLAS 290 *Introductory Latin* (6 credits)

The fundamentals of Latin grammar are presented in a course designed to enable the student to read the principal Roman authors as soon as possible.

CLAS 298 *Selected Topics in Classics* (3 credits)

CLAS 299 *Selected Topics in Classics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CLAS 320 *The Heroic Epics of Greece and Rome* (3 credits)

Homer's *Iliad* and *Odyssey* and Virgil's *Aeneid* are considered in depth, with some attention given to other examples of epic, such as the *Argonautica* of Apollonius of Rhodes and Lucan's *Pharsalia*. Topics include epic as a genre, the nature of oral poetry, ethical values presented and the epic tradition and innovation. The texts are read in English translation.

CLAS 330 *Greek Drama* (3 credits)

Designed as an introduction to Greek drama from the origins of tragedy in the sixth century to New Comedy, this course consists of a detailed study of selected plays of Aeschylus, Sophocles, Euripides, Aristophanes and Menander. Also considered are Aristotle's *Poetics* and production techniques of the Greek theatre. The texts are read in English translation.

**CLAS 341 *(also listed as HIST 323)*
Greek History from Alexander to the Roman Conquest (3 credits)**

A political, social, economic, and cultural history of the Greek world from Alexander the Great to the Roman conquest of Greece in 146 B.C.
NOTE: Students who have received credit for CLAS 241/HIST 224 or HIST 323 may not take this course for credit.

**CLAS 343 *(also listed as HIST 327)*
History of the Roman Empire (3 credits)**

This course offers a political, social, economic, and cultural history of the Roman Empire from Augustus to the end of the Roman Empire in the West.
NOTE: Students who have received credit for CLAS 243/HIST 226 or HIST 327 may not take this course for credit.

CLAS 353 *Representations of Women in Ancient Greece and Rome* (3 credits)

The ancient Greek and Roman representations of women are examined within their historical and cultural contexts. Focus is placed on the changing social roles, status and images of women in antiquity. Both visual and literary sources are used.

CLAS 364 *Classical Greek Art and Archaeology* (3 credits)

An exploration of the monuments and artifacts of Classical Greece, ca. 680 to 380 B.C., this course concentrates on architecture, sculpture, vase painting, artistic production and methods of interpretation.

CLAS 365 *Art and Archaeology of the Hellenistic Age* (3 credits)

An investigation of the art and archaeology of the Hellenistic age from the death of Alexander in 323 to the mid-first century B.C., this course examines architecture, sculpture, mosaics, wall painting and the minor arts; emphasis is on the Roman influence on Greek art of the period.

CLAS 369 *Roman Art and Archaeology* (3 credits)

An introduction to the artifacts and monuments of Roman civilization from the sixth century B.C. through the Empire (third century A.D.), this course examines artistic styles, techniques, function, iconography and interpretation.

CLAS 370 *Practicum in Archaeology* (3 credits)

Prerequisite: Permission of the Department. This course is designed to give the student on-site fieldwork experience in either survey or excavation work. At least one month in the field is required.

CLAS 381 *Reading Greek Prose* (3 credits)

Prerequisite: CLAS 280 or equivalent. Prose

works of authors such as Herodotus, Xenophon and Plato are read in the original Greek text. Attention is given to further study of grammatical and syntactical structures of the language.

NOTE: Students who have received credit for CLAS 380 may not take this course for credit.

CLAS 382 *Reading Greek Poetry*
(3 credits)

Prerequisite: CLAS 280 or equivalent. Selected works of the ancient poets are read in the original Greek text, with emphasis on Homer and Euripides. Attention is given to further study of the grammatical and syntactical structures of the language.

NOTE: Students who have received credit for CLAS 380 may not take this course for credit.

CLAS 391 *Reading Latin Prose* (3 credits)

Prerequisite: CLAS 290 or equivalent. Prose works of authors such as Caesar, Cornelius Nepos, Cicero and Pliny are read in the original Latin text. Attention is given to further study of grammatical and syntactical structures of the language.

NOTE: Students who have received credit for CLAS 390 may not take this course for credit.

CLAS 392 *Reading Latin Poetry* (3 credits)

Prerequisite: CLAS 290 or equivalent. Selected works of the Roman poets are read in the original Latin text, with emphasis on Catullus, Ovid, Martial and Petronius. Attention is given to further study of grammatical and syntactical structures of the language.

NOTE: Students who have received credit for CLAS 390 may not take this course for credit.

CLAS 398 *Selected Topics in Classics*
(3 credits)

CLAS 399 *Selected Topics in Classics*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CLAS 410 *Advanced Greek Prose*
(3 credits)

Prerequisite: CLAS 381 and 382, or equivalent. Works of the Greek historians, philosophers and orators are studied in depth. While authors read vary from year to year, the primary focus is on Herodotus, Thucydides, Plato or Demosthenes.

CLAS 411 *Advanced Greek Poetry*
(3 credits)

Prerequisite: CLAS 381 and 382, or equivalent. Works of Greek epic, lyric or dramatic poetry are studied in depth. While authors read vary from year to year, the primary focus is on Homer, Aeschylus, Sophocles, Euripides or Pindar.

CLAS 420 *Advanced Latin Prose*
(3 credits)

Prerequisite: CLAS 391 and 392, or equivalent.

Works of the Roman historians, philosophers and orators are studied in depth. While authors read vary from year to year, the primary focus is on Cicero, Sallust, Livy or Tacitus.

CLAS 421 *Advanced Latin Poetry*
(3 credits)

Prerequisite: CLAS 391 and 392, or equivalent. Works of the Roman poets are studied in depth. While authors read vary from year to year, the primary focus is on Virgil, Ovid, Horace, Juvenal or Lucretius.

CLAS 450 *Honours Seminar* (3 credits)

Prerequisite: Permission of the Department. The seminars focus on oral presentations by students. Topics vary from year to year.

CLAS 451 *Honours Thesis* (3 credits)

Prerequisite: Permission of the Department. The student works with an individual faculty member in a particular area of archaeology, history or philology to produce an extensive research paper.

CLAS 498 *Advanced Topics in Classics*
(3 credits)

CLAS 499 *Advanced Topics in Classics*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

German

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

GERM 200 *Introductory German: Intensive Course* (6 credits)

This course provides a comprehensive introduction to the German language, completing the fundamental aspects of grammar in one term. This course covers the same material as GERM 201 and 202.

NOTE: Students who have received credit for GERM 201 or 202 may not take this course for credit.

GERM 201 *Introductory German I*
(3 credits)

This course provides an introduction to the basic elements of German for the student with no knowledge of the language.

NOTE: Students who have received credit for GERM 200 may not take this course for credit.

GERM 202 *Introductory German II*
(3 credits)

Prerequisite: GERM 201. The objective of this course is to complete the study of fundamental

aspects of German grammar.
NOTE: Students who have received credit for GERM 200 may not take this course for credit.

GERM 240 Intermediate German: Intensive Course (6 credits)

Prerequisite: GERM 200 or 202. This course provides a review of German grammar in a single term and furnishes additional details not dealt with in the introductory courses. It covers the same material as GERM 241 and 242. Practice is provided through readings, discussions, and composition.

NOTE: Students who have received credit for GERM 241 or 242 may not take this course for credit.

GERM 241 Intermediate German I (3 credits)

Prerequisite: GERM 200 or 202. This course provides a review of German grammar and deals with additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.
NOTE: Students who have received credit for GERM 240 may not take this course for credit.

GERM 242 Intermediate German II (3 credits)

Prerequisite: GERM 241. This course is a continuation of GERM 241. It completes the review of the grammar and includes additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.
NOTE: Students who have received credit for GERM 240 may not take this course for credit.

UNLESS OTHERWISE INDICATED, ALL COURSES WITH NUMBERS 256 AND HIGHER WILL BE CONDUCTED IN GERMAN.

GERM 256 Translation I (3 credits)

Prerequisite: GERM 200 or 202. This course is designed to teach students how to read and translate German texts into English. Basic problems of German grammar will be reviewed.
NOTE: Students who have received credit for GERM 255 may not take this course for credit.

GERM 257 Translation II (3 credits)

Prerequisite: GERM 256. This course is a continuation of GERM 256 and deals with more complex problems of translation.
NOTE: Students who have received credit for GERM 255 may not take this course for credit.

GERM 271 German Composition and Conversation (3 credits)

Prerequisite: GERM 200 or 202. This course is designed to broaden the command of oral and written German at the intermediate level. This course is complementary to GERM 240 and 241 and will prepare students for the complexities of advanced German.
NOTE: Students who have received credit for GERM 270 may not take this course for credit.

GERM 298 Selected Topics in German (3 credits)

GERM 299 Selected Topics in German (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GERM 301 Advanced German I (3 credits)

Prerequisite: GERM 240 or 242, and 256. This course is intended to give students increased fluency in and a firmer command of the German language. The course focuses on advanced grammatical problems, syntactical structures, and the use of idioms in spoken and written German.

NOTE: Students who have received credit for GERM 300 may not take this course for credit.

GERM 302 Advanced German II (3 credits)

Prerequisite: GERM 301. This course is a continuation of GERM 301, and deals with more complex problems of idiom and usage.
NOTE: Students who have received credit for GERM 300 may not take this course for credit.

GERM 306 Translation III (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course deals with problems and techniques of translation into German, specialized vocabulary, and common German usage.
NOTE: Students who have received credit for GERM 305 may not take this course for credit.

GERM 307 Translation IV (3 credits)

Prerequisite: GERM 306. This course is a continuation of GERM 306. The translation of a variety of texts concentrates on linguistic analysis and on the translation of idiomatic expressions.
NOTE: Students who have received credit for GERM 305 may not take this course for credit.

GERM 308 German for Business Purposes (3 credits)

Prerequisite: GERM 240 or 242, and 256. This course is designed to familiarize students with business terminology, correspondence and official usage in German.

GERM 365 German Civilization I (3 credits)

Prerequisite: GERM 240 or 242, and 256. This course is designed to acquaint students with the intellectual and cultural history of German-speaking nations.
NOTE: Students who have received credit for GERM 360 may not take this course for credit.

GERM 366 German Civilization II (3 credits)

Prerequisite: GERM 240 or 242, and 256. This course is designed to acquaint students with the cultural diversity of Germany, Austria, and Switzerland, with emphasis on developments since World War II.
NOTE: Students who have received credit for GERM 360 may not take this course for credit.

GERM 398 *Selected Topics in German*
(3 credits)

GERM 399 *Selected Topics in German*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GERM 405 *Early German Literature I*
(3 credits)

Prerequisite: GERM 240 or 242, and 257. This course deals with German literature from its beginning of Germanic and Old High German literature through Middle High German literature, to the end of the Middle Ages, around 1500. Students will write a research paper.

NOTE: Students who have received credit for GERM 400 or 452 may not take this course for credit.

GERM 406 *Early German Literature II*
(3 credits)

Prerequisite: GERM 240 or 242, and 257. This course deals with German literature from 1500 to 1850: Humanism, Renaissance, Baroque, Enlightenment, to the Classical Period. Students will write a research paper.

NOTE: Students who have received credit for GERM 400 or 452 may not take this course for credit.

GERM 411 *Literature of the Classic Period I* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course offers a study of German literature of the late eighteenth century with emphasis on Enlightenment and *Sturm und Drang*.

NOTE: Students who have received credit for GERM 410 may not take this course for credit.

GERM 412 *Literature of the Classic Period II* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course offers in-depth study of the important Classic writers of German literature, such as Goethe and Schiller.

NOTE: Students who have received credit for GERM 410 may not take this course for credit.

GERM 416 *Literature of the Romantic Period* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course offers a study of the literature of the German Romantic period.

NOTE: Students who have received credit for GERM 415 may not take this course for credit.

GERM 421 *German Literature of the Nineteenth Century* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course offers a study of the German literature of the nineteenth century: post-Romanticism, Realism, and Naturalism.

NOTE: Students who have received credit for GERM 420 may not take this course for credit.

GERM 426 *German Literature from 1900 to 1920* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course offers a study of German literature from the *fin de siècle* to the post-World War I period. Impressionism, Expressionism, Dadaism, and the traditional genres will be discussed.

NOTE: Students who have received credit for GERM 425 may not take this course for credit.

GERM 427 *German Literature from 1920 to 1950* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course offers a study of German literature from 1920 to 1950. Works of the Weimar Republic, Hitler's Germany, the German emigration, and reaction to World War II are discussed.

NOTE: Students who have received credit for GERM 425 may not take this course for credit.

GERM 431 *German Literature Since 1950 — Part I* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course presents German literature since World War II, with emphasis on the novel.

NOTE: Students who have received credit for GERM 430 may not take this course for credit.

GERM 432 *German Literature Since 1950 — Part II* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course offers a study of German literature since World War II, with emphasis on the theatre and poetry.

NOTE: Students who have received credit for GERM 430 may not take this course for credit.

GERM 436 *The German Theatre* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course offers a study of some of the representative works of German theatre from 1400 to 1950.

NOTE: Students who have received credit for GERM 435 may not take this course for credit.

GERM 461 *History of the German Language I* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course deals with the linguistic and historic development of the German language from its Indo-European roots to the end of the Middle Ages.

NOTE: Students who have received credit for GERM 465 may not take this course for credit.

GERM 462 *History of the German Language II* (3 credits)

Prerequisite: GERM 240 or 242, and 257. This course deals with the linguistic and historic development of the German language from the Middle Ages to today. It also covers the development of the various German dialects.

NOTE: Students who have received credit for GERM 465 may not take this course for credit.

GERM 480 *Tutorial I* (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German

language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 481 Tutorial II (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 482 Tutorial III (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 483 Tutorial IV (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 490 Honours Essay Tutorial
(3 credits)

Prerequisite: Honours status. This course provides the Honours candidate with the opportunity to prepare an extensive research essay, on a topic to be chosen by the candidate with the approval of a supervising member of the faculty of the German section.

GERM 498 Advanced Topics in German
(3 credits)

GERM 499 Advanced Topics in German
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Hebrew

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

HEBR 210 Introductory Course in Hebrew
(6 credits)

A beginners' course in Hebrew, with readings of classical and modern texts.

NOTE: Students who have taken Hebrew at the cégep level, or whose schooling has been conducted in Hebrew, will not be admitted to this course.

HEBR 211 Introductory Course in Hebrew B (3 credits)

A beginners' course in Hebrew, with readings of classical and modern texts.

NOTE: Students who have taken Hebrew at the

cégep level, or whose schooling has been conducted in Hebrew, will not be admitted to this course.

HEBR 250 Intermediate Hebrew (6 credits)

Prerequisite: HEBR 210, or permission of the Department. This course will include a comprehensive review of Hebrew grammar and syntax with readings of classical and modern Hebrew texts.

HEBR 251 Intermediate Hebrew B
(3 credits)

Prerequisite: HEBR 210, or permission of the Department. This course will include a comprehensive review of Hebrew grammar and syntax with readings of classical and modern Hebrew texts.

Italian

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

ITAL 200 Introductory Italian: Intensive Course (6 credits)

This course provides a comprehensive introduction to the Italian language, completing the fundamental aspects of grammar in one term. This course covers the same material as ITAL 201 and 202.

NOTE: Students who have received credit for ITAL 201 or 202 or 210 or 211 or 252 or 253 or 254 may not take this course for credit.

ITAL 201 Introductory Italian I (3 credits)

This course provides an introduction to the basic elements of Italian for the student with no knowledge of the language.

NOTE: Students who have received credit for ITAL 200 or 210 or 211 or 252 or 253 or 254 may not take this course for credit.

ITAL 202 Introductory Italian II (3 credits)

Prerequisite: ITAL 201. The objective is to complete the study of fundamental aspects of Italian grammar.

NOTE: Students who have received credit for ITAL 200 or 210 or 211 or 252 or 253 or 254 may not take this course for credit.

ITAL 240 Intermediate Italian: Intensive Course (6 credits)

Prerequisite: ITAL 200 or 202. This course provides a review of Italian grammar in one term and deals with additional details not covered in the introductory course. It covers the same material as ITAL 241 and 242. Practice is provided through readings, discussions, and composition.

NOTE: Students who have received credit for

ITAL 241 or 242 or 250 or 251 or 252 or 253 or 254 may not take this course for credit.

ITAL 241 Intermediate Italian I (3 credits)
Prerequisite: ITAL 200 or 202. This course provides a review of Italian grammar and deals with additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.
NOTE: Students who have received credit for ITAL 240 or 250 or 251 or 252 or 253 or 254 may not take this course for credit.

ITAL 242 Intermediate Italian II (3 credits)
Prerequisite: ITAL 241. This course is a continuation of ITAL 241. It completes the review of the grammar and provides additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.
NOTE: Students who have received credit for ITAL 240 or 250 or 251 or 252 or 253 or 254 may not take this course for credit.

UNLESS OTHERWISE INDICATED, ALL COURSES WITH NUMBERS 253 AND HIGHER WILL BE CONDUCTED IN ITALIAN.

ITAL 253 Italian for Dialect Speakers I (3 credits)
This course is designed for speakers of Italian dialects who wish to acquire training in standard Italian. Emphasis is placed on grammar, lexicon, sentence structure, and other fundamentals of good usage. Both oral and written expression are emphasized.
NOTE: Students who have received credit for ITAL 200 or 201 or 202 or 240 or 241 or 242 or 252 may not take this course for credit.

ITAL 254 Italian for Dialect Speakers II (3 credits)
Prerequisite: ITAL 253. This course is a continuation of ITAL 253. It presents additional material not covered in ITAL 253 and provides practice through short readings, discussions, and composition.
NOTE: Students who have received credit for ITAL 200 or 201 or 202 or 240 or 241 or 242 or 252 may not take this course for credit.

ITAL 256 Translation I (3 credits)
Prerequisite: ITAL 200 or 202 or 254. This course provides a review of the Italian grammar and introduces students to the fundamentals of translation.
NOTE: Students who have received credit for ITAL 255 may not take this course for credit.

ITAL 257 Translation II (3 credits)
Prerequisite: ITAL 256. This course continues the review of Italian grammar begun in ITAL 256 and uses selected short texts for translation into Italian.
NOTE: Students who have received credit for ITAL 255 may not take this course for credit.

ITAL 298 Selected Topics in Italian (3 credits)

ITAL 299 Selected Topics in Italian (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ITAL 301 Advanced Grammar and Composition I (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course is intended to give the student increased fluency in and a firmer command of the language.
NOTE: Students who have received credit for ITAL 300 may not take this course for credit.

ITAL 302 Advanced Grammar and Composition II (3 credits)
Prerequisite: ITAL 301. This course is a continuation of ITAL 301. It provides students with further practice in advanced grammar and composition.
NOTE: Students who have received credit for ITAL 300 may not take this course for credit.

ITAL 306 Advanced Translation I (3 credits)
Prerequisite: ITAL 257. This course deals with idiomatic Italian usage and provides practice by means of translations into Italian of published material on a variety of topics.
NOTE: Students who have received credit for ITAL 305 may not take this course for credit.

ITAL 307 Advanced Translation II (3 credits)
Prerequisite: ITAL 306. This course is a continuation of ITAL 306. It deals with advanced problems and techniques of translation from Italian and into Italian.
NOTE: Students who have received credit for ITAL 305 may not take this course for credit.

ITAL 310 Survey of Italian Literature I (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course examines the major authors and trends of Italian literature from its origins to the end of the sixteenth century.

ITAL 311 Survey of Italian Literature II (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course examines the major authors and trends of Italian literature from the beginning of the seventeenth century to the present.

ITAL 365 Italian Civilization I (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course provides a survey of Italy's cultural and scientific achievements until the end of the sixteenth century. Attention is given to Italy's social, political, and economic life.
NOTE: Students who have received credit for ITAL 360 may not take this course for credit.

ITAL 366 Italian Civilization II (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course provides a survey of Italy's cultural and scientific achievements from the beginning of the seventeenth century to the present day. Attention is given to Italy's social, political, and economic life.
NOTE: Students who have received credit for ITAL 360 may not take this course for credit.

ITAL 398 Selected Topics in Italian
(3 credits)

ITAL 399 Selected Topics in Italian
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ITAL 410 Literary Criticism (3 credits)
Prerequisite: ITAL 310 and 311. This course is a survey of literary criticism from the Renaissance to the present; outstanding examples of representative authors are studied in detail. Emphasis is placed on modern critical theories.

ITAL 415 Dante I: Earlier Works
(3 credits)
Prerequisite: ITAL 240 or 242 or 254. In this course selected passages of Dante's earlier works are read and analysed.

ITAL 416 Dante II: Divina commedia
(3 credits)
Prerequisite: ITAL 415. This course undertakes an analysis of the *Divina commedia*.

ITAL 420 Petrarch and Early Italian Poetry (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course examines selected works of the *Scuola siciliana* and the *Dolce stil nuovo*. Petrarch's *Canzoniere* is read and analysed.

ITAL 421 Boccaccio and the Novella
(3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course examines the origin and evolution of the early Italian novella. Emphasis is placed on the *Decameron*.

ITAL 425 Fifteenth-Century Prose and Poetry (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course deals with the rise of Humanism in Italy. Representative prose writings, chivalresque and lyric poetry, especially the lyric poetry of Poliziano and Lorenzo de' Medici, are read and analysed.

ITAL 430 The Italian Renaissance
(3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course is designed to acquaint the student with the Italian Renaissance, with emphasis on Machiavelli's *Principe* and *La mandragola*.

ITAL 432 Ariosto (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course undertakes the study of *Orlando Furioso* and some of Ariosto's minor works.

ITAL 433 Tasso and Epic Poetry
(3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course presents a study of the work of Tasso, with special emphasis upon *La Gerusalemme liberata*, within the context of Counter-Reformation Italy.

ITAL 435 Seventeenth Century Prose and Poetry (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course provides students with an opportunity to study representative scientific and literary texts. Emphasis is placed on Galileo, Sarpi, Marino, and Chiabrera.

ITAL 436 Eighteenth Century Prose and Poetry (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course examines selected philosophic and literary texts of Vico, Parini, and Alfieri.

ITAL 437 History of the Italian Theatre
(3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course provides a panoramic view of Italian theatre from its origins to the present. Emphasis is placed on Goldoni and Pirandello.

ITAL 439 Romanticism in Italy: The Early Nineteenth Century
(3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course examines the debate between neoclassicism and Romanticism and the link between Romanticism and the Risorgimento. Emphasis is placed on Monti, Foscolo, and Leopardi.

ITAL 442 Manzoni (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course undertakes a critical study of *I promessi sposi* and representative poetic and dramatic works of Manzoni.

ITAL 443 Nineteenth-Century Italian Literature after Manzoni
(3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course provides a study of representative works of the later nineteenth century, with emphasis on writers such as Verga, Carducci, and Pascoli.

ITAL 445 Twentieth-Century Italian Literature to 1945 (3 credits)
Prerequisite: ITAL 240 or 242 or 254. This course acquaints students with the major literary trends in Italy from the beginning of the twentieth century to 1945. Emphasis is placed on writers such as D'Annunzio, Pirandello, Deledda, Ungaretti, and Montale.

ITAL 446 *Italian Literature from Neo-Realism to the Present*
(3 credits)

Prerequisite: ITAL 240 or 242 or 254. This course undertakes the critical study of representative literary works from the end of World War II to the present.

ITAL 461 *History of the Italian Language I* (3 credits)

Prerequisite: ITAL 302. This course deals with the history of the Italian language from its origins to the end of the thirteenth century through the study of representative texts. Some attention is given to the other Romance languages.

NOTE: Students who have received credit for ITAL 460 may not take this course for credit.

ITAL 462 *History of the Italian Language II* (3 credits)

Prerequisite: ITAL 302. This course deals with the history of the Italian language from the beginning of the fourteenth century to the present day through the study of representative texts. Some attention is given to the other Romance languages and to Italian dialects.

NOTE: Students who have received credit for ITAL 460 may not take this course for credit.

ITAL 480 *Tutorial I* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 481 *Tutorial II* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 482 *Tutorial III* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 483 *Tutorial IV* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 490 *Honours Essay Tutorial*
(3 credits)

Prerequisite: Honours status. This course provides the Honours candidate with the opportunity to prepare an extensive research essay, on a topic to be chosen by the candidate

with the approval of a supervising member of the faculty of the Italian section.

ITAL 498 *Advanced Topics in Italian*
(3 credits)

ITAL 499 *Advanced Topics in Italian*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Linguistics

LING 200 *Introduction to Linguistic Science* (6 credits)

Introduction to the principles of general linguistics for beginners in the field. Basic phonology and morphology. Emphasis on synchronic linguistic analysis, with a brief examination of historical and comparative linguistics.

LING 298 *Selected Topics in Linguistics*
(3 credits)

LING 299 *Selected Topics in Linguistics*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LING 300 *Sociolinguistics* (3 credits)

Prerequisite: LING 200, or permission of the Department. A study of the beliefs, interrelationships, and values of societal groups as reflected in language.

LING 312 *Theory of Grammars* (6 credits)

Prerequisite: LING 200, previously or concurrently, or permission of the Department. This course deals with the history and development of grammatical theory prior to Chomsky. Considerable emphasis is placed on traditional grammar, the school of de Saussure, and Bloomfieldian structuralism. The principles of historical linguistics and the development of semantic theory and Meaning-Structure Grammar are also examined.

LING 320 *Semantics* (3 credits)

This course introduces the basic notions required for analysis of meaning within a theory of language. The central objective is the representation of the logical structure of natural language as a basis for explaining how competent users interpret words, phrases, and sentences. Readings focus on elements of grammatical structure, lexical content, and the context of utterance. Some contemporary works in linguistic semantics are critically examined.

LING 330 *Sanskrit* (6 credits)

Prerequisite: LING 200, previously or concurrently, or permission of the Department. An accelerated introduction to the fundamentals of Sanskrit grammar through the extensive reading

of texts, first in transliteration and later in devanāgarī. Particular attention is given to the language of the *Rig-Veda*.

LING 341 *Introduction to Romance Linguistics* (3 credits)

A study of the modern Romance languages, especially French, Italian, and Spanish, and their development from Latin.

NOTE: Students who have received credit for LING 441 may not take this course for credit.

LING 372 *Descriptive and Instrumental Phonetics* (3 credits)

Description of speech sounds in articulatory terms. Identification and description of sounds that occur outside the Indo-European family of languages. Description of speech sounds as to their acoustic qualities: frequency, amplitude, pitch, stress. Interpretation of sound spectrograms.

LING 373 *Phonological Analysis* (3 credits)

Prerequisite: LING 200 and/or 372, or permission of the Department. The fundamentals of distinctive-feature analysis as developed by Jakobson, Chomsky, and Halle. Theoretical concepts and notational techniques are emphasized. Extensive training in data analysis and rule writing.

LING 398 *Selected Topics in Linguistics* (3 credits)

LING 399 *Selected Topics in Linguistics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LING 400 *Theory of Generative Grammar I* (3 credits)

Prerequisite: LING 200 and 312. Chomsky's extended standard theory. Phrase-markers and phrase-structure rules; x-bar syntax; the lexicon; WH-movement, though-movement, topicalization, and VP-preposing.

LING 401 *Theory of Generative Grammar II* (3 credits)

Prerequisite: LING 400, or equivalent. Subject raising; reflexive interpretation; structure-preserving, trace, and cyclic principles; constraints; fillers; the binding theory and current developments.

LING 421 *Non-Indo-European Structures* (6 credits)

Prerequisite: LING 200, or permission of the Department. This course is intended to give the student an in-depth acquaintance with the structures of several languages differing markedly in their nature from Indo-European. Possible areas of study might be Eskimo, Finnish, Japanese, Swahili, Turkish, some Amerindian or Malayo-Polynesian language, etc. As a general rule, only four languages are investigated in a particular year.

LING 431 *Comparative Indo-European Linguistics* (6 credits)

Prerequisite: LING 200, or permission of the Department. Through a comparative study of the phonology of the various branches of the Indo-European language family (Indo-Iranian, Hellenic, Italic, Germanic, Slavic, Baltic, etc.), this course familiarizes the student with the techniques used in linguistic reconstruction. Emphasis is given to the development and differentiation of languages through time.

LING 436 *Advanced Indo-European Studies* (3 credits)

Prerequisite: LING 431, previously or concurrently. Detailed study of the synchronic and diachronic grammar of an Indo-European dialect essential to the reconstruction of the proto-language. Extensive readings are undertaken in both original texts and in scholarly contributions to their elucidation. Emphasis is placed on current issues and research in the field.

LING 437 *Problems in Indo-European Comparative Grammar* (3 credits)

Prerequisite: LING 431, previously or concurrently. This course explores one or more areas of Indo-European comparative grammar of particular interest in current research. Extensive reading in the scholarly literature is undertaken with emphasis on the principles by which hypotheses in historical linguistics can be framed and the criteria for testing such hypotheses.

LING 446 *Comparative Grammar of Greek and Latin* (3 credits)

Prerequisite: LING 200 or CLAS 280 or 290. A study of the similarities and differences in the phonology and morphology of Ancient Greek and Latin. Some attention is also given to issues of syntax and the lexicon.

LING 447 *Mycenaean Greek* (3 credits)

Prerequisite: LING 200 or CLAS 280. Dating from the fourteenth to the twelfth century BCE, Mycenaean — the language of the Linear B tablets — is the earliest form of Greek attested. In this course, selected documents will be read, both in transliteration and in the Mycenaean syllabary, with attention both to linguistic and to cultural issues.

NOTE: Students who have received credit for this topic under a LING 498 number may not take this course for credit.

LING 456 *Homeric Greek* (3 credits)

Prerequisite: LING 200 or CLAS 280. An examination of the language of Homer, an artificial mixture of dialectal and diachronic variants, a *Kunstsprache*. Against the background of a study of the comparative and historical grammar of Greek and its development from Proto-Indo-European, the focus is on diachronic aspects of Homeric grammar and diction. Readings are principally from Books One and Three of the *Iliad*.

LING 457 *Archaic Latin and the Italic Dialects* (3 credits)

Prerequisite: LING 200 or CLAS 290. A study of inscriptions in archaic Latin and the ancient Italic dialects Oscan and Umbrian. Examination of the main features of phonology, morphology, syntax and the lexicon which distinguish Osco-Umbrian from Latin, with reference to their development from Proto-Indo-European.

LING 461 *Hittite* (3 credits)

Prerequisite: LING 330 or 431, previously or concurrently, or permission of the Department. The fundamentals of Hittite grammar are presented through the extensive reading of texts, both in transliteration and cuneiform. Considerable attention is given to problems of comparative grammar.

LING 498 *Advanced Topics in Linguistics* (3 credits)

LING 499 *Advanced Topics in Linguistics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Modern Languages

The following courses give instruction in languages and cultures not normally covered by the Department. Any or all of them may be offered when a specific ethnic community has persuaded the University of its interest in seeing them put on, and of its willingness to support them.

MODL 298 *Special Topics in Modern Languages* (3 credits)

MODL 299 *Special Topics in Modern Languages* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MODL 398 *Special Topics in Modern Languages* (3 credits)

MODL 399 *Special Topics in Modern Languages* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MODL 498 *Advanced Topics in Modern Languages* (3 credits)

MODL 499 *Advanced Topics in Modern Languages* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Portuguese

PORT 400 *Portuguese Language and Literature* (6 credits)

Prerequisite: SPAN 257, or equivalent, and any six credits at the 400 level in Spanish. A course designed for advanced Spanish language students. Readings in Portuguese begin as early as the second week of class.

NOTE: Students whose first language is Portuguese, or who have received a substantial part of their education in Portuguese, are not permitted to take this course for credit.

Russian

RUSS 330 *The Structure of Russian* (6 credits)

Prerequisite: No previous knowledge of Russian required. An accelerated but thorough introduction to the grammatical structure of modern Russian. The emphasis is on reading. The course aims to provide students with the ability to read scholarly and literary prose with the aid of a dictionary. Intended primarily for students who need Russian as an aid to research and for students of Linguistics.

RUSS 400 *Advanced Russian Grammar and Readings* (6 credits)

Prerequisite: RUSS 330, or equivalent. This course is a continuation of RUSS 330. Further readings with emphasis on scientific and scholarly prose. Considerable attention is devoted to advanced points of grammar, vocabulary, stylistics, and translation.

Spanish

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

SPAN 200 *Introductory Spanish: Intensive Course* (6 credits)

This course provides a comprehensive introduction to the Spanish language, completing the fundamental aspects of grammar in one term. This course covers the same material as SPAN 201 and 202.

NOTE: Students who have received credit for SPAN 201 or 202 or 210 or 211 may not take this course for credit.

SPAN 201 *Introductory Spanish I* (3 credits)

This course provides an introduction to the basic elements of Spanish for the student with no knowledge of the language.

NOTE: Students who have received credit for SPAN 200 or 210 or 211 may not take this course for credit.

SPAN 202 *Introductory Spanish II*
(3 credits)

Prerequisite: SPAN 201. The objective of this course is to complete the study of fundamental aspects of Spanish grammar.

NOTE: Students who have received credit for SPAN 200 or 210 or 211 may not take this course for credit.

UNLESS OTHERWISE INDICATED, ALL COURSES WITH NUMBERS 240 AND HIGHER WILL BE CONDUCTED IN SPANISH.

SPAN 240 *Intermediate Spanish: Intensive Course* (6 credits)

Prerequisite: SPAN 200 or 202. This course provides a review of Spanish grammar in a single term and furnishes additional details not dealt with in the introductory courses. It covers the same material as SPAN 241 and 242. Practice is provided through readings, discussions, and composition.

NOTE: Students who have received credit for SPAN 241 or 242 or 250 or 251 may not take this course for credit.

SPAN 241 *Intermediate Spanish I*
(3 credits)

Prerequisite: SPAN 200 or 202. This course provides a review of Spanish grammar and deals with additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for SPAN 240 or 250 or 251 may not take this course for credit.

SPAN 242 *Intermediate Spanish II*
(3 credits)

Prerequisite: SPAN 241. This course is a continuation of SPAN 241. It completes the review of the grammar and includes additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for SPAN 240 or 250 or 251 may not take this course for credit.

SPAN 256 *Translation I* (3 credits)

Prerequisite: SPAN 200 or 202. This course provides a review of Spanish grammar and introduces students to the principles of translation.

NOTE: Students who have received credit for SPAN 255 may not take this course for credit.

SPAN 257 *Translation II* (3 credits)

Prerequisite: SPAN 256. This course continues the review of Spanish grammar begun in SPAN 256 and uses selected short texts for translation into Spanish.

NOTE: Students who have received credit for SPAN 255 may not take this course for credit.

SPAN 298 *Special Topics in Spanish*
(3 credits)

SPAN 299 *Special Topics in Spanish*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SPAN 301 *Advanced Grammar and Composition I* (3 credits)

Prerequisite: SPAN 240 or 242. This course is designed to help students understand some advanced aspects of Spanish grammar and to provide practice in the correct and effective writing of Spanish.

SPAN 302 *Advanced Grammar and Composition II* (3 credits)

Prerequisite: SPAN 301. This course continues the study of advanced aspects of Spanish grammar and provides practice in the correct and effective writing of Spanish by means of types of composition such as summary, description, narration, argumentation, and essay.

SPAN 304 *Introduction to the Study of Hispanic Literature* (3 credits)

Prerequisite: SPAN 240 or 242. This course introduces students to fundamental concepts necessary for the study of Hispanic literature. It deals with the relation between literature and other disciplines and presents some basic tools and techniques of research and criticism as related to Hispanic literature. Students are encouraged to take this course concurrently with SPAN 310 or 311 or 320 or 321.

NOTE: Students who have received credit for this topic under a SPAN 298 number may not take this course for credit.

SPAN 306 *Advanced Translation I*
(3 credits)

Prerequisite: SPAN 257. This course deals with idiomatic Spanish usage and provides practice by means of a number of translations into Spanish of published material on a variety of topics.

NOTE: Students who have received credit for SPAN 305 may not take this course for credit.

SPAN 307 *Advanced Translation II*
(3 credits)

Prerequisite: SPAN 306. This course continues the practice of idiomatic Spanish through the translation into Spanish of published material on a variety of topics. Special attention is given to texts from the world of business.

NOTE: Students who have received credit for SPAN 305 may not take this course for credit.

SPAN 310 *Survey of Spanish Literature I*
(3 credits)

Prerequisite: SPAN 240 or 242. This course

provides a panoramic view of Spanish literature as produced in the Peninsula from the twelfth to the seventeenth century.

SPAN 311 Survey of Spanish Literature II
(3 credits)

Prerequisite: SPAN 240 or 242. This course provides a panoramic view of Spanish literature as produced in the Peninsula from the eighteenth to the twentieth century.

SPAN 320 Survey of Spanish-American Literature I (3 credits)

Prerequisite: SPAN 240 or 242. This course provides a panoramic view of Spanish-American literature from the colonial period to the end of the nineteenth century.

SPAN 321 Survey of Spanish-American Literature II (3 credits)

Prerequisite: SPAN 240 or 242. This course provides a panoramic view of Spanish-American literature of the twentieth century.

SPAN 362 Civilization of Mexico, the Central American Region and the Spanish Caribbean
(3 credits)

Prerequisite: SPAN 240 or 242. This course is designed to acquaint the student with the cultural achievements of the region within an historical framework. Emphasis is on Mexico and Cuba; the major achievements of the Dominican Republic, Venezuela, Colombia, and the Central American countries are highlighted. *NOTE: Students who have received credit for SPAN 361 may not take this course for credit.*

SPAN 363 Civilization of the Southern Cone and the Andean Region
(3 credits)

Prerequisite: SPAN 240 or 242. This course is designed to acquaint the student with the cultural achievements of the region within an historical framework. Emphasis is on Argentina, Peru, and Chile; the major achievements of Uruguay, Paraguay, Ecuador, and Bolivia are highlighted. *NOTE: Students who have received credit for SPAN 361 may not take this course for credit.*

SPAN 365 The Civilization of Spain
(3 credits)

Prerequisite: SPAN 240 or 242. This course undertakes a study of important historical events and figures of Spain from the Middle Ages to the present. It also provides an introduction to Spanish arts and cultural achievements. *NOTE: Students who have received credit for SPAN 360 may not take this course for credit.*

SPAN 370 Structure of the Spanish Language (3 credits)

Prerequisite: SPAN 240 or 242. This course provides an overview of the linguistic structure of the Spanish language. Topics include

phonetics, morphology, syntax, and semantics. *NOTE: Students who have received credit for this topic under a SPAN 398 number may not take this course for credit.*

SPAN 398 Special Topics in Spanish
(3 credits)

SPAN 399 Special Topics in Spanish
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SPAN 401 Effective Written Communication in Spanish
(3 credits)

Prerequisite: SPAN 301. This course provides an opportunity for students to perfect their ability to write Spanish clearly and effectively for professional purposes, with encouragement of direct contact with Hispanic cultural institutions.

SPAN 403 Methods of Literary Analysis
(3 credits)

Prerequisite: SPAN 304 or 311 or 321. This course presents the student with some of the fundamental concepts of twentieth century literary theory and criticism such as formalism, Marxism, structuralism, semiotics, psychoanalytical and feminist approaches. Practice in criticism is applied to Hispanic texts.

NOTE: Students who have received credit for SPAN 303 may not take this course for credit.

SPAN 406 Medieval Literature (3 credits)

Prerequisite: SPAN 310. This course examines Castilian prose and poetry until about 1500. Texts analysed include selections from *El libro de buen amor*, *La Celestina*, as well as the works of authors such as the Marqués de Santillana, Juan de Mena, and Juan Boscán. *NOTE: Students who have received credit for SPAN 407 may not take this course for credit.*

SPAN 411 Golden Age Prose (3 credits)

Prerequisite: SPAN 310. This course provides critical study of the novel and other narrative didactic genres of the sixteenth and seventeenth centuries through the analysis of representative works. Emphasis is on Cervantes' contribution to the novel.

SPAN 412 Golden Age Drama and Poetry
(3 credits)

Prerequisite: SPAN 310. This course examines the development of Spanish verse drama of the sixteenth and seventeenth centuries through the analysis of representative authors such as Lope de Vega and Tirso de Molina. The work of non-dramatic poets such as Góngora is also considered.

NOTE: Students who have received credit for SPAN 413 may not take this course for credit.

SPAN 416 *Peninsular Neoclassicism and Romanticism* (3 credits)

Prerequisite: SPAN 240 or 242. This course presents the literature of eighteenth-century neoclassicism and the rules of its art through a study of representative authors, such as Jovellanos and Moratín. Nineteenth-century Romantic poetry and drama are studied through the works of representative authors such as Espronceda, Zorrilla, and Bécquer.

SPAN 417 *Peninsular Realism and Naturalism* (3 credits)

Prerequisite: SPAN 240 or 242. This course presents the development of the novel during the Realist and Naturalist periods in Spain, through the analysis of representative authors such as Pardo Bazán, Clarín, Valera, and Pérez Galdós.

SPAN 420 *The Generation of 1898* (3 credits)

Prerequisite: SPAN 240 or 242. Through a study of authors such as Unamuno, Baroja, Azorín, Machado, and Valle-Inclán, this course examines the Spanish crisis of 1898 and its issues, such as the Spanish national character and the Castilian landscape.

SPAN 421 *Twentieth-Century Spanish Literature to the Civil War* (3 credits)

Prerequisite: SPAN 240 or 242. This course presents twentieth-century Spanish literature up to 1939. Special attention is given to García Lorca and the Group of 1927.

NOTE: Students who have received credit for SPAN 431 may not take this course for credit.

SPAN 422 *Twentieth-Century Spanish Literature after the Civil War* (3 credits)

Prerequisite: SPAN 240 or 242. This course presents literature of the post-civil war period as well as some of the later "experimental" novels.

NOTE: Students who have received credit for SPAN 431 may not take this course for credit.

SPAN 423 *Twentieth-Century Spanish-American Literature before 1960* (3 credits)

Prerequisite: SPAN 240 or 242. This course examines the literary production in Spanish America during the first half of this century through representative works of some of the major writers of the era, such as Gallegos, Bombal, Borges, Neruda, and Azuela.

NOTE: Students who have received credit for SPAN 432 may not take this course for credit.

SPAN 424 *Twentieth-Century Spanish-American Literature from 1960 to the Present* (3 credits)

Prerequisite: SPAN 240 or 242. This course examines the phenomenon of *el boom* in Spanish-American literature and its innovative

aspects in authors such as García Márquez, Fuentes, Vargas Llosa, Rulfo, Puig, and Allende.
NOTE: Students who have received credit for SPAN 432 may not take this course for credit.

SPAN 430 *Women and Hispanic Literature* (3 credits)

Prerequisite: SPAN 311 or 321 or 403. This course examines the relationship between women and literature in Spain and Spanish America, through issues such as the image of women in Hispanic literature, women as fictional characters, and women as writers.

NOTE: Students who have received credit for SPAN 498C may not take this course for credit.

SPAN 441 *Spanish-American Romanticism* (3 credits)

Prerequisite: SPAN 240 or 242. This course examines the development of post-Independence literature of Spanish America until the end of the nineteenth century. Emphasis is placed on identifying distinctively Spanish-American literary traits within the Romantic context.

SPAN 442 *Spanish-American Modernism and Vanguardism* (3 credits)

Prerequisite: SPAN 240 or 242. This course presents the stages of Modernism and Vanguardism through a study of representative works of authors such as Martí, Darío, Mistral, Neruda, and Paz.

SPAN 450 *The Spanish-American Short Story* (3 credits)

Prerequisite: SPAN 240 or 242. This course presents the Spanish-American short story from the thematic, historical, and theoretical perspectives. Representative authors include Borges, Cortázar, García Márquez, and Valenzuela.

NOTE: Students who have received credit for SPAN 498G may not take this course for credit.

SPAN 461 *History of the Spanish Language* (3 credits)

Prerequisite: SPAN 310 or 370. This course provides a study of the development of the Spanish language from earliest times to the present. Consideration is given to the language in the Americas.

NOTE: Students who have received credit for this topic under a SPAN 498 number may not take this course for credit.

SPAN 464 *Issues in Spanish-American Civilization* (3 credits)

Prerequisite: SPAN 362 or 363. This course examines the current status of the issues that have shaped Spanish-American culture, such as the native peoples' question, land reform, religious institutions, and the search for identity. It provides an opportunity for students to work in an Hispanic cultural context, as emphasis is placed on research projects that include interviews, oral presentations and reports.

SPAN 480 *Tutorial I* (3 credits)
Prerequisite: Permission of the Department.
This course consists of guided readings in Spanish language and/or Hispanic literature, to meet the student's individual needs.

SPAN 481 *Tutorial II* (3 credits)
Prerequisite: Permission of the Department.
This course consists of guided readings in Spanish language and/or Hispanic literature, to meet the student's individual needs.

SPAN 482 *Tutorial III* (3 credits)
Prerequisite: Permission of the Department.
This course consists of guided readings in Spanish language and/or Hispanic literature, to meet the student's individual needs.

SPAN 483 *Tutorial IV* (3 credits)
Prerequisite: Permission of the Department.
This course consists of guided readings in Spanish language and/or Hispanic literature, to meet the student's individual needs.

SPAN 490 *Honours Essay Tutorial*
(3 credits)
Prerequisite: Honours status. This course provides the Honours candidate with the opportunity to prepare an extensive research essay, on a topic to be chosen by the candidate with the approval of a supervising member of the faculty of the Spanish section.

SPAN 498 *Advanced Topics in Spanish*
(3 credits)

SPAN 499 *Advanced Topics in Spanish*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Faculty	<i>Chair</i> MARTIN ALLOR, <i>Associate Professor</i>	LORNA ROTH KIM SAWCHUK DONAT J. TADDEO HAL THWAITES
	<i>Professors Emeriti</i> JOHN BUELL JOHN E. O'BRIEN, s.j.	<i>Assistant Professors</i> CHARLES ACLAND MARY FLANAGAN MONIKA KIN GAGNON ANDRA MCCARTNEY PETER C. VAN WYCK
	<i>Professors</i> WILLIAM BUXTON MARC GERVAIS, s.j. NIKOS METALLINOS	<i>University Research Professor</i> GAIL VALASKAKIS
	<i>Associate Professors</i> MAURICE CHARLAND W. LAMBERT GARDINER RICHARD HANCOX DENNIS MURPHY CHANTAL NADEAU	<i>Adjunct Professors</i> ROBERT BABE WILLIAM GILSDORF KEVIN WILSON
Location	<i>Loyola Campus</i> Bryan Building, Room: BR 111 (514) 848-2555	
Department Objectives	<p>The Communication Studies Department takes a broad approach to the study of media and communication. The aim is to develop the student's appreciation of the role played by the mass media in society. With the emphasis on a humanistic value-oriented assessment, the program is designed to develop both the critical faculties and creative potential of students.</p> <p>Each program has three components: a focus on humanities and liberal arts, a focus on social science and research, and a focus on creative laboratory work. These enable students to be thoroughly prepared for a wide range of career opportunities in the media industries, in public relations, and in government.</p>	
Facilities	<p>The Department provides the necessary equipment and facilities to accommodate students in laboratory courses. These include: two television studios with editing facilities and field units, 16mm film equipment, a digital non-linear editing suite for film and video, and analog and digital sound facilities. There are two photography labs, a graphics lab, and a digital media laboratory. The Learning Centre houses audio, film, slide, video, and computer technology for independent study and classroom use.</p>	
Department Admission Requirements	<p>The Department of Communication Studies has distinct admission procedures for each of its programs, in addition to the normal admission process of Concordia University. The Department is prepared to receive applications as early as October. Interested candidates should obtain information about admission requirements of the Department's programs by contacting the Admissions Committee, Department of Communication Studies, Loyola Campus, Concordia University, 7141 Sherbrooke Street West, Montréal, Québec, H4B 1R6.</p> <p><i>Graduate Work in Communication Studies</i></p> <p>The Department also offers a one-year diploma program for students who have completed their undergraduate degree in another field, and an MA in Media Studies for those with two years of media experience and academic work in Communications. A PhD in Communications is offered jointly with Université de Montréal and UQAM. For details, please refer to the School of Graduate Studies Calendar or contact the Department.</p>	

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

The Department offers three programs of study, and one other jointly with Journalism.

- a) *BA, Specialization in Communication Studies*: consisting of 60 credits in Communication Studies and 30 credits from electives outside the Department. **42** **BA Major in Communication Studies**
18 COMS 230³, 240³, 256³, 278³, 280³, 282³
6-12 Chosen from courses in Cluster I*
12-18 Chosen from courses in Cluster II-IV with at least three credits from each Cluster at the 300 or 400 level
**No more than one course from Cluster I may be done concurrently.*
- b) *BA, Major in Communication Studies*: consisting of 42 credits in Communication Studies and 48 credits from electives outside the Department. **42** **BA Major in Communication and Cultural Studies**
Stage I
9 COMS 240³, 325³, 326³
3 Chosen from COMS 301³, 302³, 303³, 304³
Stage II
3 Chosen from COMS 323³, 367³, 368³
Stage III
3 Chosen from COMS 462³, 463³, 465³
24 Chosen from Communication Clusters III and IV at the 300 or 400 level with at least six credits in each Cluster, and at least six credits at the 400 level in addition to the *Stage III* requirement.
- c) *BA, Specialization in Communication and Journalism*: consisting of 60 credits in Communication and Journalism courses and 30 credits from electives outside Communication and Journalism.
- d) *BA, Major in Communication and Cultural Studies*: consisting of 42 credits in Communication Studies and 48 credits from electives outside the Department.

Elective credits are understood as courses taken in other departments or Faculties of the University. Credits in Communication Studies or Journalism, or in Cinema (Faculty of Fine Arts) may not be used in lieu of electives.

200-level courses are normally taken in first year, 300-level courses in second year, 400-level courses in third year.

Written work may be required in English for courses in Journalism; please consult the Department.

Students are required to complete the appropriate entrance profile for entry into the program (see §31.002 - Programs and Admission Requirements - Profiles).

- 60 BA Specialization in Communication Studies**
18 COMS 230³, 240³, 256³, 278³, 280³, 282³
6-18 Chosen from courses in Cluster I*
24-36 Chosen from courses in Cluster II-IV with at least three credits from Cluster II and six credits from each of Clusters III and IV at the 300 or 400 level

**No more than one course from Cluster I may be done concurrently.*

- 60 BA Specialization in Communication and Journalism**
NOTE: Students must meet the admission requirements of both the Departments of Communication Studies and Journalism. This program is designed to prepare graduates for the English-language media.
Stage I
15 JOUR 201⁶, 203³; COMS 240³, 256³
3 Chosen from COMS 278³, 282³
Stages II & III
3 Chosen from JOUR 205³, 215³
12 JOUR 302³, 303³, 310³, 315³
6 Chosen from COMS 378⁶, 387⁶
3 JOUR 400³
3 Chosen from JOUR 318³, 330³, 336³, 402³, 404³
15 Chosen from Communication Clusters III and IV at the 300 or 400 level.

1st-Year Courses

1ST-YEAR COURSES:

COMS 230	Basic Writing for the Media (3 credits)	COMS 278	Sound I (3 credits)
COMS 240	Communication Theory (3 credits)	COMS 280	Film I (3 credits)
COMS 256	Introduction to Digital Communication Media (3 credits)	COMS 282	Television I (3 credits)
		COMS 325*	Approaches to Communication Research (3 credits)
		COMS 326*	Media Institutions and Policies (3 credits)

**These courses are reserved for students enrolled in the Communication and Cultural Studies Major.*

CLUSTERS:

<i>I. Laboratory</i>	COMS 378	Sound II (6 credits)	COMS 478	Sound III (6 credits)
	COMS 379	Visual Dynamics I (6 credits)	COMS 481	Film III (6 credits)
	COMS 380	Visual Dynamics II (6 credits)	COMS 487	Television III (6 credits)
	COMS 381	Film II (6 credits)	COMS 490	Communication Programming (6 credits)
	COMS 387	Television II (6 credits)		
<i>II. Seminar/Practicum</i>	COMS 305	Advanced Scriptwriting for Film (6 credits)	COMS 444	Television Aesthetics I (3 credits)
	COMS 324	Communication Analysis of Environment (3 credits)	COMS 445	Television Aesthetics II (3 credits)
	COMS 330	Advanced Scriptwriting for Television (6 credits)	COMS 470	Advertising and the Consumer Society (3 credits)
	COMS 355	New Technology and Communication Media I (3 credits)	COMS 471	Public Relations: Principles and Problems (3 credits)
	COMS 356	New Technology and Communication Media II (3 credits)		
<i>III. Media Theory, History and Criticism</i>	COMS 301	Selected Topics in National Cinemas (Cycled Courses) (3 credits)	COMS 331	Documentary Television (3 credits)
	COMS 302	Selected Topics in Film Genres (Cycled Courses) (3 credits)	COMS 362	Psychology of Communication (3 credits)
	COMS 303	Selected Topics in Canadian Cinemas (Cycled Courses) (3 credits)	COMS 365	History of Sound Recording (3 credits)
	COMS 304	Selected Topics in Film Studies (Cycled Courses) (3 credits)	COMS 416	Film Criticism (3 credits)
	COMS 306	Documentary Film (3 credits)	COMS 417	Film Ideas (3 credits)
	COMS 320	Media Styles, Modes, and Carriers (3 credits)	COMS 434	Advanced Topics in Film Studies (3 credits)
	COMS 321	History of Media Technologies (3 credits)	COMS 435	Advanced Topics in Documentary Film and Television (3 credits)
	COMS 322	Media and Media Culture (3 credits)	COMS 462	Communication, Culture, and Popular Art (3 credits)
	COMS 323	Media Theory (3 credits)	COMS 463	Semiotics (3 credits)
			COMS 465	Rhetoric and Communication (3 credits)
<i>IV. Media and Society</i>	COMS 352	Broadcasting Policy in Canada (3 credits)	COMS 453	Communication Ethics (3 credits)
	COMS 354	Children's Television (3 credits)	COMS 454	Communication Law and Administration (3 credits)
	COMS 360	Mass Communication (3 credits)	COMS 460	Political Communication (3 credits)
	COMS 361	Seminar in Propaganda (3 credits)	COMS 461	Organizational Communication (3 credits)
	COMS 366	Interpersonal Communication and Cultural Context (3 credits)	COMS 464	Race, Ethnicity and Media (3 credits)
	COMS 367	Media and Cultural Context (3 credits)	COMS 468	Communications, Development and Colonialism (3 credits)
	COMS 368	Media and Gender (3 credits)	COMS 472	Communication Technologies and Gender (3 credits)
	COMS 419	Communications and Indigenous Peoples (3 credits)	COMS 473	International Communications (3 credits)
	COMS 437	Seminar in Media Forecast (3 credits)		

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Courses

COMS 230 *Basic Writing for the Media*
(3 credits)
Prerequisite: Registration in a Communication

Studies program. This course is designed to provide knowledge of and practice in the special written forms and formats utilized by the media.

Assignments are practically oriented towards possible student productions.

COMS 240 *Communication Theory*
(3 credits)

Prerequisite: Registration in a Communication Studies program. Through lectures, discussions, and selected readings from the works of key theoreticians, this course introduces students to major approaches to the understanding of the process of communication.

COMS 256 *Introduction to Digital Communication Media*
(3 credits)

Prerequisite: Registration in a Communication Studies program. This course introduces the student to basic concepts in digital communications, primarily computer-based media, and their application to the fields of television, film and sound production. The course provides an historical, theoretical, and critical perspective on new and developing digital technologies.

COMS 278 *Sound I* (3 credits)

Prerequisite: Registration in a Communication Studies program. This course is designed to provide the student with a basic working knowledge of audio systems both natural and electronic, to understand the various affective and psychological qualities of sound, and how sound may be structured into imaginative aural forms. Lectures and laboratory: average six hours per week.

COMS 280 *Film I* (3 credits)

Prerequisite: Registration in a Communication Studies program. The course is designed to provide students with a basic working knowledge of the communicational and aesthetic characteristics of the medium of film, and of the specific elements inherent in their effective use. Course methodology includes lectures, screenings, readings, workshops and exercises using 16mm film. Lectures and laboratory: average six hours per week.

NOTE: Students who have received credit for COMS 275 or for this topic under a COMS 298 number may not take this course for credit.

COMS 282 *Television I* (3 credits)

Prerequisite: Registration in a Communication Studies program. The course is designed to provide students with a basic working knowledge of the communicational and aesthetic characteristics of the medium of television, and of the specific elements inherent in their effective use. Course methodology includes lectures, screenings, readings, workshops and exercises using television. Lectures and laboratory: average six hours per week.

NOTE: Students who have received credit for COMS 284 or for this topic under a COMS 298 number may not take this course for credit.

COMS 298 *Selected Topics in Communication Studies*
(3 credits)

COMS 299 *Selected Topics in Communication Studies*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

COMS 301 *Selected Topics in National Cinemas* (3 credits)

Prerequisite: 30 credits; permission of the Department. This course focuses on selected national cinemas. The analytic perspective of the course varies but may encompass such issues as cultural contexts; aesthetic conventions; economic and policy constraints; and the history of canons and their renewals. Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 302 *Selected Topics in Film Genres* (3 credits)

Prerequisite: 30 credits; permission of the Department. This course presents an analysis and critique of the medium of film through the framework of conceptions of genre. The analytic focus of the course varies but may include such issues as the history of genre theory as it has been applied in film analysis; the analysis of canonical genres (e.g. film noir, neo-realism, the western); the analysis of emergent or hybrid film genres (e.g. women's cinema, the experimental cinema, docudrama). Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 303 *Selected Topics in Canadian Cinemas* (3 credits)

Prerequisite: 30 credits; permission of the Department. This course focuses on the analysis and critique of cinema practices in Canada. It may include the analysis of such issues as regional or cultural specificities (e.g. le cinéma québécois, film in British Columbia, African-Canadian cinema); the analysis of particular historical periods (e.g. the Canadian Silent cinema, independent cinema in the 1980s); or particular aesthetic formations (e.g. the "cinéma d'auteur", Studio D of the National Film Board). Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 304 *Selected Topics in Film Studies* (3 credits)

Prerequisite: 30 credits; permission of the Department. The topic of this course varies but may include such issues as film theories; the political economy of cinema; the analysis of particular periods in film history; the analysis of the films of particular directors and/or producers; film policies, or the relations between film, video, and television. Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 305 *Advanced Scriptwriting for Film* (6 credits)

Prerequisite: Registration in a Communication Studies program; submission of a qualifying assignment by July 1 and subsequent approval of instructor. This assignment, which varies from year to year, is intended to test the student's writing ability and creative imagination. A practical course in writing film-drama: story construction and plotting, scene-making, characterization and character development, dialogue, dramatic continuity, timing, pacing, rhythm, suspense, and creative criticality. Many of these fictional and dramatic techniques are, as the occasion arises, applied to non-fictional scripts as well. The method consists of lecture, discussion, demonstration, critique. Assignments are on-going.

COMS 306 *Documentary Film* (3 credits)

Prerequisite: 30 credits; open to all University students; permission of the Department. A survey of the documentary film field from 1895 until today, with an examination of major styles (romantic, realistic, expressionistic, avant-garde, etc.) in the works of significant documentary filmmakers. The method consists of lecture, screenings, critique, and discussion.

Communication Studies students may take no more than six credits from the Mel Hoppenheim School of Cinema or Department of Print Media and Photography courses of the Faculty of Fine Arts.

COMS 320 *Media Styles, Modes, and Carriers* (3 credits)

Prerequisite: Registration in a Communication Studies program. This course examines selected elements from the history of representational arts, such as painting, architecture, drama or music, as instances of forms and styles of communication. Readings and viewings of major styles, artworks, and authors are included.

COMS 321 *History of Media Technologies* (3 credits)

Prerequisite: Registration in a Communication Studies program. This course examines the history of the technical aspects of such media as photography, cinema, scenography, radio, and television. This history is considered in relationship to social, cultural and formal developments within these media.

COMS 322 *Media and Media Culture* (3 credits)

Prerequisite: Registration in a Communication Studies program. Media, and their impact on people and society, in order of historical appearance: literacy, printing, the still photograph, cinema, radio, television. The growth of the technologies of work, movement, education, thought, and social organization. The problems of the individual in a technological environment. *NOTE: Students who have received credit for COMS 304 may not take this course for credit.*

COMS 323 *Media Theory* (3 credits)

Prerequisite: Registration in a Communication Studies program. Analysis of the historical and current evidence in an attempt to understand what media are, what they do of themselves, their common characteristics, cumulative patterns, and necessary effects. Are there inherent "laws" of media? Emphasis is on the intellectual faculty as manifested in society's response to media. *NOTE: Students who have received credit for COMS 304 may not take this course for credit.*

COMS 324 *Communication Analysis of Environment* (3 credits)

Prerequisite: 30 credits; registration in a Communication Studies program. This course engages in general and detailed analysis of various information complexes: museums, galleries, exhibitions, countrysides, landscapes, city streets, highways, department stores, churches, and others. These analyses are conducted from the standpoint of information values used to influence prospective audiences of films, television programs, or exhibition and theatre visitors. The basic values of light, space, sound, picture, words, and exhibit structures are explored through individual student projects in real locations. Students work on individual projects under the supervision of the directing professor. Tutorial course.

NOTE: Students who have received credit for COMS 255 may not take this course for credit.

COMS 325 *Approaches to Communication Research* (3 credits)

Prerequisite: Registration in Communication and Cultural Studies Major; or permission of the Department. This course introduces students to the logics of inquiry of the major research approaches used within Communication and Cultural Studies. It familiarizes students with the formation of research questions, the choice of appropriate methodological tools, and the interpretation and reporting of research findings. There is a particular focus on qualitative approaches to field research and discourse and textual analysis.

COMS 326 *Media Institutions and Policies* (3 credits)

Prerequisite: Registration in Communication and Cultural Studies Major; or permission of the Department. This course introduces students to the analysis of the institutional, political, and economic forces that have shaped the development of media during the twentieth century. Attention is given to the ownership structures, corporate practices, and state policy interventions affecting media institutions in both the public and private sectors. A particular focus is given to the interrelations between Cultural, Multicultural, and Communication Policy interventions.

COMS 330 *Advanced Scriptwriting for Television* (6 credits)

Prerequisite: Registration in a Communication Studies program; submission of a qualifying

assignment by July 1 and subsequent approval of instructor. This assignment, which varies from year to year, is intended to test the student's writing ability and creative imagination. Anatomy of script; audio-visual components and functions; TV drama, comedy, documentary, docu-drama. The creative process: plot development, character and dialogue; uses of tension, conflict, "tricks of the trade"; professional attitude and discipline vis-à-vis the market. Lectures, demonstrations, group discussions, and script projects.

COMS 331 *Documentary Television*
(3 credits)

Prerequisite: 30 credits; open to all University students; permission of the Department. A survey of the documentary television field from its beginning until today, with an examination of characteristic styles and forms (informative, biographical, current events, compilative, etc.). The method consists of lecture, video example, critique, and discussions.

COMS 352 *Broadcasting Policy in Canada*
(3 credits)

Prerequisite: 30 credits; permission of the Department. This course acquaints the student with the historical development of broadcasting and broadcasting legislation in Canada. It covers the present state of broadcasting policy in Canada, its goals and problems, and explores alternative solutions.

NOTE: Students who have received credit for COMS 467 may not take this course for credit.

COMS 354 *Children's Television*
(3 credits)

Prerequisite: 30 credits; permission of the Department. This course explores forms of communication that have developed between children and television. Topical areas include future policies and planning in the light of developmental needs, ethical parameters, and experiments in creative empowerment.

COMS 355 *New Technology and Communication Media I*
(3 credits)

Prerequisite: COMS 256; permission of the Department. This course examines the applications of computers in the field of communications from conceptual, theoretical, and practical perspectives. Analog and digital representation, transmission, storage, and processing of visual and aural information are discussed. Lectures and laboratory.

COMS 356 *New Technology and Communication Media II*
(3 credits)

Prerequisite: COMS 355; permission of the Department. This course examines more advanced concepts and techniques for the production of computer-generated colour video graphics; computer-generated sound; information input/retrieval networks; hypertext, hypermedia,

other digital media, and interactive multi-media systems. Lectures and laboratory.

COMS 360 *Mass Communication*
(3 credits)

The course examines the nature and forms of mass communication, the social sources and uses of mass communication, its psychology, audiences, and effects. The ethics of mass communication are also discussed. Through guest lecturers from the various media and readings of contemporary analyses/critiques, issues such as media ownership and access, government and self-regulation, technological implications, media accountability, etc., are raised.

COMS 361 *Seminar in Propaganda*
(3 credits)

Prerequisite: 30 credits. The aim of this course is to recognize the orchestration of the elements of propaganda in media, and to develop the means to deal with it. Course methodology includes lectures, discussions, and projects.

COMS 362 *Psychology of Communication*
(3 credits)

Prerequisite: Registration in a Communication Studies program. The objectives of the course are to provide the learner with: 1) an overview of psychological processes active in the communicative act; 2) the opportunity to explore a single media area in depth, either independently or in a small group. Through a variety of formats, topic areas such as the following are explored: perception and information processing, language development, areas of para-psychology related to communication, influences on attitude/behaviour, verbal/non-verbal codes, meaning, etc.

COMS 365 *History of Sound Recording*
(3 credits)

Prerequisite: 30 credits; permission of the Department. This course traces the technological development of sound recording and establishes the historical context and the social and economic conditions in which this development has occurred. The evolution of studio recording practices, the structure of the music industry and its global operations, changes in the production and consumption of music, and changes in the role of music as a form of cultural communication are examined. Attention is also given to sound recording practices in cinema, radio, television and digital media.

NOTE: Students who have received credit for COMS 398F may not take this course for credit.

COMS 366 *Interpersonal Communication and Cultural Context* (3 credits)

Prerequisite: 30 credits; permission of the Department. This course examines the relationship between value orientations, social perception, self-concept, identity, and other culturally-determined phenomena, as well as verbal and non-verbal communication processes. It draws upon theory and research on communication

between members of different cultures and sub-cultures.
NOTE: Students who have received credit for COMS 363 may not take this course for credit.

COMS 367 *Media and Cultural Context*
(3 credits)

Prerequisite: 30 credits; permission of the Department. This course examines the ways in which different cultures express themselves using print, film, radio, and television; the cultural content of media messages; the role of mass communication across cultural boundaries, as well as media representation of, and access by, cultural groups. The course utilizes screenings and case studies.

NOTE: Students who have received credit for COMS 363 may not take this course for credit.

COMS 368 *Media and Gender* (3 credits)

Prerequisite: 30 credits; permission of the Department. This course investigates how sex and gender are represented in and by the media. The course examines sexuality, sexism, and theories of gender through a critical examination of contemporary media topics.

NOTE: Students who have received credit for this topic under a COMS 398 number may not take this course for credit.

COMS 378 *Sound II* (6 credits)

Prerequisite: COMS 230; COMS 278; permission of the Department. This course gives the student a knowledge of the basic disciplines necessary for constructing aural message forms from the simplest to the most complex; experience in the various technologies required to apply these aural forms to radio, film, television, etc. Students prepare, produce, and direct, individually and in teams, a number of projects. Lectures and laboratory: average six hours per week.

COMS 379 *Visual Dynamics I* (6 credits)

Prerequisite: COMS 280 or permission of the Department. This course involves both theory and fieldwork in photographing human-created environments; e.g. the city, using natural light. The student acquires an understanding of the problems of distance and direction by means of lectures, critiques of fieldwork, and individual consultation.

NOTE: Students are required to possess certain recommended equipment.

NOTE: Students who have received credit for COMS 374 may not take this course for credit.

COMS 380 *Visual Dynamics II* (6 credits)

Prerequisite: COMS 379 or permission of the Department. A study of the development of visual artifacts and media in the search for an increasingly adequate mimesis of persons, situations, and meanings. The course comprises both the practical and the theoretical aspects of the visual image, historically and currently, and examines the assumptions underlying the quest for the auto-communicative image. Lectures and

laboratory: average six hours per week.
NOTE: Students who have received credit for COMS 375 may not take this course for credit.

COMS 381 *Film II* (6 credits)

Prerequisite: Above-average standing in COMS 280; permission of the Department. This course involves an examination of the communicative process through the medium of film. Areas covered include scripting, directing, and shooting, with both silent and sync-sound equipment. Productions are designed to test the student's theoretical knowledge and give practical experience in the craft of filmmaking. Lectures and laboratory: average six hours per week.

COMS 387 *Television II* (6 credits)

Prerequisite: COMS 282; permission of the Department. A study of the components related to the creation of the television documentary and short-feature program in terms of the theoretical possibilities inherent in the medium. Student productions in the two genres, from idea-stage through completed videotape, constitute the laboratory section of the course. Lectures and laboratory: average six hours per week.

COMS 398 *Selected Topics in Communication Studies*
(3 credits)

COMS 399 *Selected Topics in Communication Studies*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

COMS 416 *Film Criticism* (3 credits)

Prerequisite: 60 credits; permission of the Department. An introduction to the assumptions, methodologies, and vocabularies implicit in important schools of popular and academic film criticism.

COMS 417 *Film Ideas* (3 credits)

Prerequisite: Registration in a Communication Studies program. Seminar using film criticism to focus on aesthetic/cultural dimension of present trend-setting films, and to explore students' sensibility in the context of contemporary culture. Methodology includes viewings, discussions, written critiques, critical/aesthetic readings.

COMS 419 *Communications and Indigenous Peoples* (3 credits)

Prerequisite: 60 credits; permission of the Department. Focusing on Canadian First Peoples territories in the North and South, selected circumpolar regions, parts of Australia and other areas of the world inhabited by indigenous peoples, this course examines from a global perspective the historical, theoretical, and (cross-)cultural content and contexts of aboriginal media — financing, audience research, product development, distribution issues, and

policy formation. Broadcasting, print, and digital media case studies and materials are a central component.

NOTE: Students who have received credit for COMS 364 may not take this course for credit.

COMS 434 *Advanced Topics in Film Studies* (3 credits)

Prerequisite: 60 credits; registration in a Communication Studies program. This course provides an in-depth study of a selected area of film studies. Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 435 *Advanced Topics in Documentary Film and Television* (3 credits)

Prerequisite: COMS 306 or 331; 60 credits; registration in a Communication Studies program. This course provides an in-depth study of selected film and television documentary genres. Specific topics for this course will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for COMS 436 may not take this course for credit.

COMS 437 *Seminar in Media Forecast* (3 credits)

Prerequisite: 60 credits. This course examines trends in film, sound, television, and other media for future applications. The course includes theory of media effects. Representatives from industry and government are invited to discuss future trends in media utilization. The course demands a theoretical and practical model for original or novel use of a medium or media mix.

COMS 444 *Television Aesthetics I* (3 credits)

Prerequisite: 30 credits; registration in a Communication Studies program. This course involves the study and application of evaluative judgements and aesthetic principles appropriate to the television medium. It emphasizes the development of television criticism and aesthetics based on a synthesis of the fundamental image elements (light, colour, space, time, motion, and sound) together with an analysis of their interrelationship in the finished product: the television program.

COMS 445 *Television Aesthetics II* (3 credits)

Prerequisite: COMS 444. This tutorial course is a continuation of COMS 444 for students who wish to do research and experimentation with specific aspects of television aesthetic principles. Assignments include a research paper derived from specific experimental television production units.

COMS 453 *Communication Ethics* (3 credits)

Prerequisite: 60 credits; COMS 361 or permission of the Department. This course allows students to confront issues of creative respon-

sibility and ethical dilemmas in media practice. Emphasis is placed upon the relationship between production and theory at the level of ethical responsibility. Specific issues include ethical theories as applied to media, communication and information; the relationship of human values and technologies of information reproduction; the possibilities of critical media practice; identification of challenges emerging from undergraduate experience in Communication Studies.

NOTE: Students who have received credit for COMS 498M, JOUR 446 may not take this course for credit.

COMS 454 *Communication Law and Administration* (3 credits)

Prerequisite: 30 credits; registration in a Communication Studies program. This course focuses upon the legal and business aspects of the communications industry. Among the items covered are basic contract law, torts or delicts, libel and slander, and copyright laws. The legal relationships between the various parties involved in the field of communications, e.g. producer and writer are also analysed.

COMS 460 *Political Communication* (3 credits)

Prerequisite: Permission of the Department. The relationships between media institutions and political institutions, both in Canada and internationally, are examined. Issues such as: the flow of political information; the social and political construction of news; the politics of regulation; the politics of influence in campaigns, nation-building socialization through media; ideology in the media, and alternatives to traditional media are explored.

NOTE: Students who have received credit for COMS 465 may not take this course for credit.

COMS 461 *Organizational Communication* (3 credits)

Prerequisite: Permission of the Department. The flow of communication within organizational and institutional structures is examined. Topics such as: communication function; patterns and networks; directionality; overload and underload; communication roles and expectations; and processes of organizing are explored. Discussion and field study are combined with readings for an emphasis on applied theory.

NOTE: Students who have received credit for COMS 465 may not take this course for credit.

COMS 462 *Communication, Culture, and Popular Art* (3 credits)

Prerequisite: 60 credits; permission of the Department. An introduction to the social analysis of works of popular art. Cultural products such as television programs, hit records, and popular novels are examined through techniques of textual analysis. Within the context of an examination of cultural

theories, the course focuses on (1) critical methods based in the theory of rhetoric and (2) theories of mass culture and alienation.

COMS 463 *Semiotics* (3 credits)

Prerequisite: Registration in a Communication Studies program. This course provides a detailed introduction to the semiotics of communication. The course considers the formal characteristics of signs and codes and examines how signs or texts produce meaning. Central to this course is the notion that sign-systems are fundamental to the production of knowledge and ideology. The course proceeds through lectures, an analytical reading of assigned texts, and student discussion and presentations.

COMS 464 *Race, Ethnicity and Media* (3 credits)

Prerequisite: 60 credits; permission of the Department. This course addresses practical and theoretical issues of race and ethnicity that have become focal points for current debates in public cultural expression and media studies. The following themes are discussed: cultural/racial difference and its implications for media studies; the (mis)representation of multicultural and multiracial minorities in mainstream and alternative media; questions of access to arts and other cultural funding sources; implications of employment equity legislation in light of media budget cuts; and cross-cultural awareness programs vs. anti-racist training for media professionals. Theoretical readings which frame issues of cultural and racial representation are an integral part of this course.

NOTE: Students who have received credit for COMS 498R may not take this course for credit.

COMS 465 *Rhetoric and Communication* (3 credits)

Prerequisite: 60 credits. This course focuses upon communication as persuasive or as producing identification. Emphasis is placed upon the role of communication in civic affairs. Classical and contemporary approaches to rhetorical theory and criticism are examined.

COMS 468 *Communications, Development and Colonialism* (3 credits)

Prerequisite: 60 credits; permission of the Department. This seminar discusses the role media can play in indigenous and international development. The concept of development communications is examined in the context of debates within neo-colonial and post-colonial theories.

COMS 470 *Advertising and the Consumer Society* (3 credits)

Prerequisite: Permission of the Department. Advertising as an economic force is examined from a mass-media focus. Communication strategies are analysed. A promotional campaign is prepared and presented as a team project.

COMS 471 *Public Relations: Principles and Problems* (3 credits)

Prerequisite: Permission of the Department.

This course considers the principles and responsibilities of public relations, and critically examines specific P.R. problems and the choice of media in effecting solutions.

COMS 472 *Communication Technologies and Gender* (3 credits)

Prerequisite: 30 credits; permission of the Department. Feminist theories of communication technologies are used to critique the impact and meanings of these technologies in various spheres of cultural activity. Topics include the mass media, technological mediations in organizations and institutions, and the re-articulation of domestic and public spaces, such as the Internet and the World Wide Web. Special attention is paid to these electronic and digital technologies — or new media — and the communicational and representational possibilities they enable or foreclose. The class is conducted as an intensive seminar. Completion of a prior course in women's studies or gender studies is recommended.

NOTE: Students who have received credit for COMS 398S may not take this course for credit.

COMS 473 *International Communications* (3 credits)

Prerequisite: 60 credits; permission of the Department. This course explores historical and current parameters of international communications within the context of current global shifts in power/knowledge relations. Discussion topics are selected from among the following: key development and neo-colonial theories, cultural/media imperialism, globalization, the UN infrastructure, the Right to Communicate debates, national sovereignty issues, international broadcasting, cross-cultural audience reception research and effects theories, telediplomacy, the World Wide Web (Internet), women as an international constituency group, and others.

COMS 478 *Sound III* (6 credits)

Prerequisite: COMS 378; permission of the Department. This course examines the concepts and techniques of digital audio, digital signal processing, sound sampling, synthesis, and MIDI sequencing in media production and postproduction. Through the analysis and discussion of selected media programs, students develop an awareness of the requirements, possibilities, and emerging conventions of digital audio production. Students produce a number of sound projects individually or in teams. Lectures and laboratory: average six hours per week.

COMS 481 *Film III* (6 credits)

Prerequisite: Above-average standing in COMS 381; permission of the Department. An advanced course in film theory and communication. Filmmaking processes covered include scripting, directing, "A and B roll" editing, and

shooting with crystal sync-sound equipment. Lectures and laboratory: average six hours per week.

COMS 487 *Television III* (6 credits)
Prerequisite: Above-average standing in COMS 387; permission of the Department. An advanced course in television theory and communication. Possible options, depending on the ability of the students in any one year, include the dramatic documentary and the complete adaptation for television of professional plays. Lectures and laboratory: average six hours per week.

COMS 490 *Communication Programming*
(6 credits)
Prerequisite: COMS 355; permission of the Department. This course studies the taxonomy of digital media from an information design and programming perspective. Special attention is given to authoring tools, scripting, hypermedia and hypertext applications in their current and developing digital forms. Individual or group projects are completed. Lectures and laboratory: average six hours per week.

No more than six credits may be taken in Apprenticeships or Directed Study. The appropriate Cluster for Apprenticeship and Directed Study courses is determined by the course content as outlined in the student proposal.

COMS 494 *Communication Studies Apprenticeship I* (3 credits)
Prerequisite: 30 credits; registration in a Communication Studies program; permission of the Department. In consultation with the Apprenticeship Committee, students are given the opportunity to work in the communications industry under the co-supervision of a faculty member and a media professional. Students

may be accepted for an open apprenticeship position offered to the Department, or they may formulate a study proposal on their own initiative. In order to receive credit, the apprenticeship proposal must be approved by the Committee.

COMS 495 *Communication Studies Apprenticeship II* (3 credits)
Prerequisite: Registration in a Communication Studies program; permission of the Department.
NOTE: Students who have received credit for COMS 494 may register for COMS 495.

COMS 496 *Directed Study I* (3 credits)
Prerequisite: Registration in a Communication Studies program. Towards the end of their second year, students enrolled in a Communication Studies program who have demonstrated scholarly and creative ability may be selected for major research or production in a communications area of special interest. During the third year, individually or in teams, the project is realized in close collaboration with faculty directors.
NOTE: Students who have received credit for COMS 495 may not take this course for credit.

COMS 497 *Directed Study II* (3 credits)
Prerequisite: Registration in a Communication Studies program.
NOTE: Students who have received credit for COMS 496 may register for COMS 497.

COMS 498 *Advanced Topics in Communication Studies*
(3 credits)

COMS 499 *Advanced Topics in Communication Studies*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.080 ECONOMICS

Faculty	Chair IAN IRVINE, Professor	M. GREGORY LEBLANC ZENG RUNG LIU DAN OTCHERE BALBIR S. SAHNI MICHAEL SAMPSON ECKHARD SIGGEL WILLIAM A. SIMS
	Professors JALEEL AHMAD SYED AHSAN GORDON FISHER JAMES McINTOSH FRANK MÜLLER	Assistant Professors KARINE GOBERT NIKOLAY GOSPODINOV JÖRGEN HANSEN NILS-PETTER LAGERLÖF CORINNE LANGINIER CHRISTIAN SIGOUIN
Location	Associate Professors SHAFIQ ALVI ANASTAS ANASTASOPOULOS CHRISTIAN BELZIL BRYAN CAMPBELL NURAL ISLAM	
	Sir George Williams Campus Annex ER, Room: 100 (514) 848-3900	
Department Objectives	The Department aims to educate students in economics, both at the graduate and undergraduate level, and to contribute to the advancement of the discipline through research and teaching. Economists study the production, distribution, and consumption of goods and services – essential knowledge for today's business people and policy makers. Blending both theory and practical applications, the Department of Economics serves students preparing for related specialized professions (Honours, Specialization, Co-operative) as well as those interested in a generalized understanding of the discipline (Major, Minor programs).	
Programs	<p>Students are responsible for satisfying their particular degree requirements. Students must apply to the departmental Honours adviser for formal admission to the Honours program. The application is usually made after completion of the first-year courses. The superscript indicates credit value.</p> <p>NOTE: Calculus I is a prerequisite for many Economics courses. Students who have not taken MATH 209 or equivalent must take it as an elective within their first 15 credits.</p>	

BA DEGREE PROGRAMS IN ECONOMICS

60 BA Honours in Economics

Stage I

6 *ECON 201³, 203³

6 **ECON 221³, 222³

Stage II

6 ECON 301³, 302³

6 ECON 303³, 304³

6 ECON 325³, 326³

3 ECON 324³

3 Chosen from ECON 318³, 319³

Stage III

6 ECON 401³, 403³

6 ECON 421³, 422³

12 400-level ECON elective credits

60 BA Specialization in Economics

Stage I

6 *ECON 201³, 203³

6 **ECON 221³, 222³

Stage II

6 ECON 301³, 302³

6 ECON 303³, 304³

3 Chosen from ECON 318³, 319³

6 ECON 324³, 325³

3 ECON elective credits

Stage III

3 ECON 421³ or 423³

21 400-level ECON elective credits

42 BA Major in Economics

Stage I

6 *ECON 201³, 203³

6 **ECON 221³, 222³

Stage II

6 ECON 301³, 302³

6 ECON 303³, 304³

3 Chosen from ECON 318³, 319³, 324³

3 ECON elective credits

	<p><i>Stage III</i></p> <p>12 400-level ECON credits</p> <p>30 Minor in Economics</p> <p><i>Stage I</i></p> <p>6 *ECON 201³, 203³</p> <p><i>Stage II</i></p> <p>6 ECON 318³, 319³</p> <p>6 ECON elective credits</p>	<p><i>Stage III</i></p> <p>12 ECON elective credits</p> <p><i>*Students exempted from ECON 201 and/or 203 are required to replace these courses with ECON elective credits.</i></p> <p><i>**Any equivalent six credits satisfy this component of the program. See §200.7.</i></p>
	<p>BCOMM DEGREE PROGRAMS IN ECONOMICS</p> <p>BComm Honours in Economics</p> <p>BComm Major in Economics (See §61.60)</p>	<p>BUSINESS STUDIES</p> <p>Certificate in Business Studies</p> <p>Minor in Business Studies (See §61.140)</p>

<p><i>Economics Co-operative Program</i></p>	<p><i>Director</i></p> <p>BALBIR S. SAHNI, Associate Professor</p> <p>The Economics Co-operative program is offered to students who are enrolled in the BA Honours or Specialization in Economics. Students interested in applying for the Economics co-op should refer to §24 where a full description of the admission requirements is provided. Academic content is identical to that of the regular program, but six Study terms are interspersed with four Work terms.</p> <p>Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education in order to continue their studies in the co-op format.</p> <p>Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Economics co-op committee, which includes the student's advisers.</p> <p>Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.</p>
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Courses	<p><i>Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.</i></p>
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ECON 200 *Introductory Economics*
(6 credits)

This course is designed primarily for students not majoring in Economics or Commerce, but who wish to have an introduction to economics and the Canadian economy. Its content is essentially the same as that of ECON 201 and ECON 203. However, there is greater emphasis on the economic environment of the firm, and the use of elementary tools of analysis to study Canadian economic institutions, government economic policies, and current economic issues.

NOTE: Students who have received credit or exemption for ECON 201 and/or 203, or equivalent, may not take this course for credit.

ECON 201 *Introduction to Microeconomics* (3 credits)

Introduction to the functioning of the market system; concepts of supply and demand, the role of prices in resource allocation; production decisions by firms. Analysis of differences between competition and monopoly, and the implications for economic efficiency; theories of labour markets and wage determination.

NOTE: Students who have received credit or exemption for ECON 200 may not take this course for credit.

ECON 203 *Introduction to Macroeconomics* (3 credits)

An introductory analysis of aggregate economic activity. The focus is on the principles of determination of the level of employment, national income, real output, inflation, and international balance of payments. The course also analyses the principles which govern trade relations among countries. These topics are integrated by a discussion of government monetary and fiscal policies to stabilize economic activity.

NOTE: Students who have received credit or exemption for ECON 200 may not take this course for credit.

ECON 221 *Statistical Methods I* (3 credits)

Prerequisite: Cégep Mathematics 311 or MATH 201. Elementary probability, permutations and combinations, binomial and normal distribution. Analysis and organization of statistical data. Tests of hypotheses. Confidence limits. Introduction into linear regression and correlation. *NOTE* See §200.7

ECON 222 *Statistical Methods II* (3 credits)

Prerequisite: ECON 221; MATH 209; or equivalent. The course is an introduction to the application of statistical techniques to economic

data. Topics discussed include, among others, time series, statistical inference, analysis of variance, correlation and regression.

NOTE See §200.7

ECON 251 *Economic History Prior to the Industrial Revolution* (3 credits)

This course is an introduction to the economic development of the Western world prior to the Industrial Revolution. The emphasis is on economic factors in history: evolution of economic systems, economic growth, development and regression within the context of changing institutional constraints. Interconnections among economic, social, and intellectual change are highlighted.

NOTE: Students who have received credit for ECON 250 may not take this course for credit.

ECON 252 *Economic History After the Industrial Revolution* (3 credits)

This course is an introduction to the main economic trends in the era of sustained growth and development which accelerated with the Industrial Revolution and continues to the present. The emphasis is on Europe with some coverage of North America and the colonial/developing world.

NOTE: Students who have received credit for ECON 250 may not take this course for credit.

ECON 298 *Selected Topics in Economics* (3 credits)

ECON 299 *Selected Topics in Economics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ECON 301 *Intermediate Microeconomic Theory I* (3 credits)

Prerequisite: ECON 201, 203; MATH 209 or equivalent. Theory and measurement of demand, theory of consumer behaviour, production, theory of the firm, and cost and revenue analysis.

ECON 302 *Intermediate Microeconomic Theory II* (3 credits)

Prerequisite: ECON 301. Market structures (perfect competition, monopoly, oligopoly), industrial concentration, factor markets, income distribution, economic efficiency, general equilibrium, welfare economics.

ECON 303 *Intermediate Macroeconomic Theory I* (3 credits)

Prerequisite: ECON 201, 203; MATH 209 or equivalent. The course introduces basic aggregate models to explore different theories on the determination of national income, interest rates and exchange rates. Topics covered include the definitions and measurements of indicators of economic activity; the components of aggregate supply and aggregate demand; the

supply and demand for money; and the dynamics of national debt and deficit. The role of macroeconomic policy, such as fiscal and monetary policy, is also examined.

ECON 304 *Intermediate Macroeconomic Theory II* (3 credits)

Prerequisite: ECON 303. This course builds on the concepts developed in ECON 303 by introducing additional features to the basic models, such as the formation of expectations and attributes of the labour market, and then using these models to explore different theories concerning the determination and the evolution of major aggregate variables, economic growth and business cycles. The role of macroeconomic policy, with an emphasis on Canada, is also examined.

ECON 311 *Economic Development* (3 credits)

Prerequisite: ECON 201, 203. The course investigates comparative economic development, with special attention to problems of capital formation, population growth, quality of labour force, and social and cultural attitudes towards economic modernization. Theories of economic development are evaluated in the context of the realities of historical patterns and the varying degrees of ability to achieve modernization.

ECON 315 *The Economic Development of Québec* (3 credits)

Prerequisite: ECON 201, 203. This course reviews past and present trends in the economic development of Québec. Emphasis is placed on the economic growth of Québec since the Second World War. Attention is given to the regional aspects of Québec's growth problems.

ECON 318 *Canadian Economic Policy and Institutions* (3 credits)

Prerequisite: ECON 201, 203. This course focuses on economic policies and institutions related to contemporary issues in the domestic economy. It is guided by the application of economic principles to such issues as regional disparities, income distribution and inequality, intra-provincial trade, social security policies, welfare programs, foreign ownership and control, competition policy, government regulation of business, unemployment, inflation, and environmental policy.

NOTE: Students who have received credit for ECON 316 may not take this course for credit.

ECON 319 *International Economic Policy and Institutions* (3 credits)

Prerequisite: ECON 201, 203. This course focuses on economic policies and institutions related to issues such as protectionism, regionalism, and globalization. Selected topics in exchange rate and currency convertibility, liberalization of economic systems, and international economic development are also covered.

NOTE: Students who have received credit for ECON 317 may not take this course for credit.

ECON 324 *Economic Data Analysis*

(3 credits)

Prerequisite: ECON 201, 203, 222. The objective of this course is to familiarize students with the techniques of data retrieval, manipulation, and analysis. Particular emphasis is placed on the CANSIM retrieval system, database programs, spreadsheet analysis, and statistical packages.

NOTE: Students who have received credit for ECON 323 may not take this course for credit.

ECON 325 *Mathematics for Economists I*

(3 credits)

Prerequisite: ECON 201, 203; MATH 209 or equivalent. This course introduces students to core topics in algebra and optimization techniques. The topics covered include vector spaces and linear transformations; matrix operations; characteristic values and vectors; matrix differentiation. In addition, the course covers a review of constrained and unconstrained optimization with economic applications; Taylor series representation, implicit function theorem, and related topics.

NOTE: Students who have received credit for MAST 234 or MATH 251 or 282 may not take this course for credit.

ECON 326 *Mathematics for Economists II*

(3 credits)

Prerequisite: ECON 325. This course covers more advanced topics in optimization methods and introduces students to techniques in economics dynamics, as well as applications of integration. Topics include quadratic forms and second-order conditions, Kuhn-Tucker theory, the maximum principle, difference and differential equations, discounting and the rudiments of probability theory.

NOTE: Students who have received credit for MAST 235, MATH 252 or 283 may not take this course for credit.

ECON 331 *Money and Banking* (3 credits)

Prerequisite: ECON 201, 203. Overview of a monetary economy: nature, forms, and the economic role of money. Monetary standards: markets, prices, and the value of money; the payments system; financial markets. Determinants of size and distribution of wealth portfolios. Supply of money: measure, composition, and size determination. The economic role of commercial banks and non-bank financial intermediaries. Central banking and monetary policy. The international monetary system. (Topics covered within the Canadian banking institutional framework.)

ECON 337 *Public Sector Economics*

(3 credits)

Prerequisite: ECON 201, 203. This course examines government fiscal activity within the context of a market economy. Rationale for public intervention is reviewed in terms of market failure and the consequent inefficiency in resource allocation. An overview of the spending and taxation policies in the Québec-Canada context is

presented. This is followed by an examination of topics such as public-spending growth, public goods, externalities and collective decision making.

NOTE: Students who have received credit for ECON 335 or 336 may not take this course for credit.

ECON 350 *Economic History of Canada*

(3 credits)

Prerequisite: ECON 201, 203. This course introduces the student to Canadian economic development focusing on the period after Confederation. The course treats the subject in a thematic, rather than a chronological, fashion and places emphasis on conflicting schools of thought and their reflection in government policies.

NOTE: Students who have received credit for ECON 351 may not take this course for credit.

ECON 352 *Economic History of the U.S.A.*

(6 credits)

Prerequisite: ECON 201, 203. American economic history is presented from the viewpoint of the "new" economic history. This is a topical approach in which formal economics is used to evaluate traditional historical material. Among the topics covered are the economic consequences of slavery, the American business cycle, the development of American central banking, the merger movements, the causes of the American "take-off", and the economic causes and consequences of the major wars.

ECON 353 *Economic History of Europe*

(6 credits)

Prerequisite: ECON 201, 203. The course explores the causes and consequences of the British industrial revolution and its diffusion to the Continent, in terms of differential national-growth patterns, and social problems associated with economic change. It includes an analysis of free trade, economic nationalism, the new imperialism, the importance of the crisis of 1929, in terms of economic organization, thought, and policy. Post-World War II reorganization, in terms of planning the welfare state, and economic integration.

ECON 361 *Industrial Organization*

(3 credits)

Prerequisite: ECON 201, 203. This course develops the relationship of the firm to various forms of market structure. The course focuses on the objectives of the corporation, corporate interdependence, and the government control of industry. A study of policy matters centres on anti-trust and corporate regulation, with respect to both the legislative and economic aspects.

ECON 362 *Economics of the Firm*

(3 credits)

Prerequisite: ECON 201, 222. This course stresses the application of economic principles and methodologies to the decision-making process of the firm, with an emphasis on the role of risk and uncertainty. Topics include

decision-making criteria, demand analysis and estimation, cost analysis and estimation, pricing theory under various market structures, applied topics in pricing, and the impact of government on the firm. This course is primarily of interest to Commerce students, but is open to others as well.

ECON 363 *Economics of Technological Change* (3 credits)

Prerequisite: ECON 201, 203. This course deals with a critical analysis of the technological constraints on economic processes, research and development, and the economic factors affecting the rate and direction of technological change. Topics include the economic implications of learning by doing and technical systems; microeconomic effects of innovation and adoption theory; and the long-term macroeconomic policy implications of technological change.

ECON 370 *Comparative Economic Systems* (6 credits)

Prerequisite: ECON 201, 203. A comparative study of contemporary economic systems. While mainly concerned with the institutional features of contemporary free-market economics, the course also deals with their counterparts: the systems of a command economy and a socialist market economy. Of primary interest are the institutions, mechanisms, and policies which govern allocation, efficiency, growth, and distribution of income, with emphasis on the historical background of the institutions and the social, political, and ideological influences which continue to shape them.

ECON 377 *The Chinese Economy* (3 credits)

Prerequisite: ECON 201, 203. This course covers an analysis of Chinese economic development since 1949. It focuses primarily on the economic transition from a planning system to a market economy. Topics include the central-planning system and its strategy for development, reforms in the agricultural organization and the structure of the industrial sector. The implications of the country's "open-door" economic policy for the global economy are also examined.

ECON 381 *Labour Economics* (3 credits)

Prerequisite: ECON 201, 203. The general objective of this course is to acquaint the student with various theoretical and empirical issues in the area of labour economics. Particular emphasis is placed upon the relation between theoretical frameworks and their empirical counterparts in Canada. Topics include the theory of wage determination, the effects of minimum wages, human capital theory, the economics of discrimination, and the economics of the household.

ECON 382 *Industrial Relations I* (3 credits)

Prerequisite: ECON 201, 203. A study of the general and practical problems that arise in the labour field, such as collective bargaining, the legal framework for the settlement of industrial disputes, the weapons of industrial conflict; the

labour movement; contemporary labour issues, such as automation, cost-push inflation, and structural employment.

ECON 386 *Economics of Human Resources* (3 credits)

Prerequisite: ECON 201, 203. A study of recent contributions by economists to the understanding of and solution to social problems which society currently faces in the areas of crime, health, education, and welfare. In addition, specific federal and provincial governmental policies in these areas are analysed with the standard tools of economics.

ECON 391 *Economics of the Environment* (3 credits)

Prerequisite: ECON 201, 203. The subject of this course is environmental quality. It proceeds through an analysis of the relationships among the natural environment, economics, and institutions. The objective is to depict the problem of environmental quality as an economic problem whose solution demands major changes in economic, political, and legal institutions. Attention is also given to policies of collective environmental actions in which the effective management of common property resources is discussed. The course concludes with a discussion of some broader issues, such as the consistency of improved environmental quality with continued economic and population growth.

ECON 392 *Urban Economics* (3 credits)

Prerequisite: ECON 201, 203. This course focuses on the basic issues of economic growth and stagnation, urban land use, the problems of the urban public economy, and special urban problems, such as transportation, congestion, poverty, housing, urban renewal, and zoning.

ECON 393 *Economics of Uncertainty* (3 credits)

Prerequisite: ECON 201, 203, 222. This course focuses on the basic rules governing the application of statistical concepts such as means, variances, covariances, to the economic aspects of the problem of uncertainty. Applications in microeconomic analysis include economic aspects of insurance as well as issues in finance such as portfolio selection, efficient markets, and the capital-asset pricing models. Applications in macroeconomics include the analysis of business cycles and problems associated with the characterization of expectations as in models of inflation. *NOTE: Students who have received credit for this topic under an ECON 398 number may not take this course for credit.*

ECON 397 *Economics of Gender* (3 credits)

Prerequisite: ECON 201, 203. This course considers a variety of topics about men and women in the Canadian economy. Its main objective is to provide the student with economic tools for analysing the numerous complex issues surrounding the relative economic status of men

and women, especially in the labour market. The course covers various theoretical and empirical aspects of what has come to be popularly known as the “economics of discrimination” or the “economics of gender”. Particular emphasis is placed on the relations among theoretical economic frameworks, their (Canadian) empirical counterparts, and public policies. While international comparisons are made, the main emphasis is given to the situation in Canada.

ECON 398 *Selected Topics in Economics*
(3 credits)

ECON 399 *Selected Topics in Economics*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ECON 401 *Advanced Microeconomic Theory* (3 credits)

Prerequisite: ECON 302, 326. Selected topics in microeconomic analysis including methodology, general equilibrium analysis, welfare economics; theory of the firm, factor pricing, and income distribution capital theory. Primarily for Major, Specialization, and Honours students.

ECON 403 *Advanced Macroeconomic Theory* (3 credits)

Prerequisite: ECON 304, 326. Selected topics in macroeconomic analysis including construction of models of the economy encompassing the labour, product, and financial markets; the role of monetary and fiscal policies; classical, Keynesian, and post-Keynesian models. Primarily for Major, Specialization, and Honours students.

ECON 405 *Welfare Theory* (3 credits)

Prerequisite: ECON 302, 304. This is an advanced course intended primarily for Honours students. The course is devoted to an examination of selected topics in contemporary welfare economics and its applications.

ECON 409 *History of Early Economic Thought* (3 credits)

Prerequisite: ECON 302, 304. This course covers the evolution of economic thought from the Greek philosophers up to (and including) Classical economics. It seeks to provide the student with an outline of the development of economic analysis in this period.

NOTE: Students who have received credit for ECON 408 may not take this course for credit.

ECON 410 *History of Modern Economic Thought* (3 credits)

Prerequisite: ECON 302, 304. This course covers the evolution of economic thought from the Historical School to modern controversies in economic reasoning, which includes a comparative treatment of Keynesian economics and Monetarism.

NOTE: Students who have received credit for ECON 408 may not take this course for credit.

ECON 413 *Economic Growth and Fluctuations* (3 credits)

Prerequisite: ECON 304. A review of some theories of causes of economic fluctuations. Discussion of the economic climate and of stabilization policies.

ECON 414 *Economic Development: Policy Analysis* (3 credits)

Prerequisite: ECON 302, 304. This course offers an advanced treatment of selected topics related to issues in economic development. Particular emphasis is placed on models of growth and structural change, such as the two-gap model, input-output analysis, and computable general equilibrium models. Trade and industrial policies, fiscal and financial policies, as well as public-sector policies including taxation, spending, and cost-benefit analysis are also discussed.

NOTE: Students who have received credit for ECON 312 or 411 may not take this course for credit.

ECON 421 *Econometrics I* (3 credits)

Prerequisite: ECON 222, 326. This course develops the simple and multiple classical regression models. The problems of misspecified structures, multi-collinearity, and forecasting are also presented.

ECON 422 *Econometrics II* (3 credits)

Prerequisite: ECON 421. This course is a continuation of ECON 421. It deals with the problems of random-error correlation, stochastic regressors, and the simulation and the estimation of multiple-equation models.

ECON 423 *Applied Econometrics*
(3 credits)

Prerequisite: ECON 302, 304, 324, 325. This course is designed to enable students to apply econometric techniques through computer analysis of case studies in model building. Topics include the analysis of aggregate consumption, construction of price indices, the estimation of production and expenditure functions, estimation and forecasting with univariate time series processes, an application with discrete dependent variables.

ECON 425 *Mathematics for Advanced Study in Economics* (3 credits)

Prerequisite: ECON 302, 304, 326. This course gives students the requisite mathematical background for graduate studies in economics. Topics include algebraic methods, and static and dynamic optimization techniques needed for the study of economic theory and econometrics. Difference and differential equations are also examined.

ECON 428 *Optimization Techniques*
(3 credits)

Prerequisite: ECON 302, 304, 326. This is an advanced course for Honours students, and for Specialization and Major students with the consent of the Department. Topics include

linear programming and input-output analysis; basic concepts and solutions of linear programming, its application to optimum resources allocation; exposition of basic inter-industry theory within the framework of input-output techniques; its applications to structural analysis.

NOTE: Only three credits will be awarded from ECON 428 and DESC 416.

ECON 432 *Advanced Monetary Theory*
(3 credits)

Prerequisite: ECON 302, 304, 331. The nature of the monetarist-Keynesian controversy and critical appraisal of the IS-LM-AS model. Special topics: theory and evidence of term structure of interest rates, post-Keynesian demand for and supply of money in aggregative and disaggregative economic models. Theory of macroeconomic policy. Transmission mechanisms, policy coordination, lags, international constraints, and other problems.

ECON 433 *Financial Economics* (3 credits)

Prerequisite: ECON 302, 304. This course introduces students to the theory and practice of finance as seen from the economist's point of view. In particular, it examines the following topics: the theory of decision making under uncertainty; the basic portfolio models, such as the CAPM and the APT; equilibrium aspects of financial markets, such as the role of arbitrage in the pricing of financial assets; the pricing of derivative securities, such as options.

NOTE: Students who have received credit for this topic under an ECON 498 number may not take this course for credit.

ECON 435 *Advanced Public Finance*
(3 credits)

Prerequisite: ECON 302, 304. In this course, several key areas in public finance are dealt with in depth. Topics covered are selected from the following: public goods and externalities, cost-benefit analysis, pricing policy of public enterprises, structure of commodity taxation, structure of income taxation, issues in tax reform, and intergovernmental fiscal relations.

ECON 436 *The Economics of Taxation*
(3 credits)

Prerequisite: ECON 302, 304. This course focuses on the effects of taxation on economic behaviour. Major topics considered include the excess burden of taxation in decisions to supply effort, savings and investment, the incidence of corporate taxation, and the design of commodity taxation. Among policy issues, topics such as tax evasion, and the taxation of multinational enterprises are examined.

ECON 442 *International Economics: Trade Theory* (3 credits)

Prerequisite: ECON 302. The basis of international trade, gains from trade, factor-price equalization, the tariff, Canadian commercial policy, trade and development, economic integration.

ECON 443 *International Economics: Finance* (3 credits)

Prerequisite: ECON 304. This course is an introduction to theory of national income determination in open economies with capital mobility. It includes analyses of balance of payments, exchange rate, and the role of monetary and fiscal policies under different exchange rate regimes. Among other issues covered are international policy coordination, optimum currency areas, and features of the international monetary system.

ECON 450 *Advanced Economic History*
(3 credits)

Prerequisite: ECON 222, 302, 304. Advanced topics in economic history, with emphasis on the application of economic theory to specific historical questions.

ECON 461 *Industrial Organization*
(3 credits)

Prerequisite: ECON 222, 302. This course examines departures from the perfect competition paradigm to analyse economic behaviour in an industrial setting. An industry consists of a number of firms which interact strategically to maximize their profits. Topics addressed include measures of market structure, theories of oligopoly, effects of potential entry, product differentiation and advertising, technological change, vertical integration, and monopoly and merger issues.

ECON 462 *The Corporate Economy*
(3 credits)

Prerequisite: ECON 302. This course investigates the nature and behaviour of the firm. Economic rationalizations are presented for organizing production within a firm. The economic effects of various organization structures are examined. Topics addressed include team production, contractual models of the firm, principal-agent theory, tournaments, and the relationship between managers, shareholders, and the outside market.

ECON 463 *Economics of Regulation*
(3 credits)

Prerequisite: ECON 302. This course is devoted to an examination of the economic aspects of governmental regulations. Besides a critical review of the economic theories of regulation, the spectrum of the existing regulatory network, and empirical investigations aimed at discerning cost-benefits, the course focuses on the process of regulatory reforms in all aspects of the Canadian economy.

ECON 464 *Game Theory, Information, and Economic Modelling* (3 credits)

Prerequisite: ECON 221, 302, 304. This course covers topics in non-cooperative game theory and information economics such as dominance, Nash equilibrium, subgame perfection, repeated games, bayesian equilibrium, sequential equilibrium,

signalling, bargaining, auctions, moral hazard, adverse selection, and bounded rationality. The course focuses on applications, such as auditing games, nuisance suits, product quality, lemons models, entry deterrence, insurance models, winner's curse, innovation and patent races.
NOTE: Students who have received credit for this topic under an ECON 498 number may not take this course for credit.

ECON 473 *Economics of Socialism*
 (3 credits)

Prerequisite: ECON 302. This course analyses the theoretical aspects of various types of socialist economies: market, centrally planned, and worker-managed. Definitions and models of the various forms are developed and compared with a capitalist model and with existing socialist economies such as those of Cuba, China, Yugoslavia, and the U.S.S.R.

ECON 481 *Advanced Labour Economics*
 (3 credits)

Prerequisite: ECON 302, 304. Advanced topics in labour economics with special emphasis on labour-market problems and policies in Canada. Topics include the theory of work-leisure choice, mobility and immigration, unemployment and unfilled vacancies, income distribution, labour-market information and the wage-price relationship.

ECON 482 *Advanced Industrial Relations*
 (3 credits)

Prerequisite: ECON 302, 304. This course covers an advanced treatment of policy issues related to the human and industrial relations system in Canada. Topics covered include functional income distribution, conflict resolution in Canada and selected countries, trade agreements and labour relations, union response to technology; the social contract and concession bargaining; and industrial democracy and the quality of work life. Labour-management experiences of other countries are used as basis for comparison.
NOTE: Students who have received credit for ECON 383 or 498D may not take this course for credit.

ECON 491 *Advanced Environmental Economics* (3 credits)

Prerequisite: ECON 302. This course provides a survey, from the perspective of economics, of public issues regarding the use of environmental resources, ecosystems and the management of environmental quality. The course covers both conceptual and methodological topics with recent and current applications. It begins with an introduction to the theory and methods of environmental and natural resource economics and concepts of sustainable development. Then the emphasis is shifted to the optimal use of natural resources, both non-renewable resources (mineral and energy) and renewable resources, and the valuation of environmental resources. In

the last part of the course, we examine national and international environmental policy issues, including intergenerational equity and environmental ethics.

ECON 493 *Regional Economics* (3 credits)

Prerequisite: ECON 302, 304. This course introduces the student to the methods and techniques of regional economic analysis, and their application to the problems of regional economies within Canada. Among the micro-economic topics covered are the location behaviour of firms and households, and the factors determining the allocation of land among alternative competing uses. Macroeconomic topics include the measurement and analysis of regional income and growth levels, cyclical changes in those levels, and interregional differences in growth rates. Policy problems pertinent to Canadian regions are stressed throughout the course.

ECON 495 *Economics of Transportation and Communications*
 (3 credits)

Prerequisite: ECON 302. Congestion problems and solutions, pricing, costs, demand, and regulation in transportation. Some applications to communications.

ECON 496 *Natural Resource Economics*
 (3 credits)

Prerequisite: ECON 302, 304. This course focuses on the problems of the finiteness of the natural resources base in Canada and in the world, and on an analysis of the demand for and supply of natural resources and energy. The course also discusses the economic aspects of a selected group of conservation measures (financial incentives, reallocation of property rights, regulation).
NOTE: Students who have received credit for ECON 396 or for this topic under an ECON 498 number may not take this course for credit.

ECON 497 *Income Distribution and Economic Inequality* (3 credits)

Prerequisite: ECON 302, 304. This course examines the extent and dimensions of economic inequality among households both domestically and internationally. Topics covered include theories of income inequality, wealth inequality, recent trends in polarization, poverty, intergenerational bequests, the welfare state, and the role of government economic policy.

ECON 498 *Advanced Topics in Economics* (3 credits)

ECON 499 *Advanced Topics in Economics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.090

EDUCATION

Faculty	<p><i>Chair</i> RICHARD F. SCHMID, <i>Associate Professor</i></p> <p><i>Professor Emeritus</i> HAROLD ENTWISTLE</p> <p><i>Professors</i> PHILIP ABRAMI ROBERT BERNARD GARY BOYD NINA HOWE ELLEN JACOBS SANDRA WEBER</p> <p><i>Associate Professors</i> JOYCE BARAKETT LOIS J. BARON PAUL BOUCHARD</p>	<p>AILIE CLEGHORN MIRANDA D'AMICO DENNIS J. DICKS GEOFFREY FIDLER ARPI HAMALIAN WILLIAM KNITTER JOANNE LOCKE LARRY PROCHNER STEVEN SHAW</p> <p><i>Assistant Professors</i> ALLYSON HADWIN HELENA P. OSANA</p> <p><i>Lecturers</i> SARA WEINBERG DAVID WELLS</p>																																																
Location	<p><i>Sir George Williams Campus</i> J.W. McConnell Building, Room: LB 579 (514) 848-2004</p>																																																	
Department Objectives	<p>The mission of the Department of Education is to provide responsible and innovative leadership in developing and disseminating knowledge about education. In training students to teach, the emphasis is not only on sound pedagogical principles and approaches, but also the values of equality, diversity, and non-discrimination.</p>																																																	
Programs	<p>(For Adult Education, see §31.090.1) Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.</p> <p>The 42-credit Major in Information Studies consists of 30 Information Studies (INST) credits, nine Education (EDUC) credits, and three Interdisciplinary Studies (INTE) credits. The curriculum focuses on the creation, organization, retrieval, distribution, and utilization of information together with its relationship to learning.</p> <p>Information Studies students must take the core curriculum of 42 credits required for a Major in Information Studies. In addition, students are encouraged, with the permission of the Information Studies Program, to combine the core curriculum with a departmental Major program. It should be noted that in addition to completing the Information Studies Major, students must meet the Faculty of Arts and Science degree requirements set forth for the second program of study. The core curriculum component of the Information Studies Major may not count for credit within the core requirements of the selected second Major, and vice versa.</p> <table><tr><td>42</td><td>BA Major in Information Studies</td><td>24</td><td>Minor in Education</td></tr><tr><td></td><td><i>Stage I</i></td><td>24</td><td>Chosen from EDUC 201⁶, 210⁶, 230³, 241³, 305³, 306³, 317³, 321³, 324³, 398³, 399⁶, 405³, 416³, 417³, 422³, 423³, 426³, 427³, 428³, 429³, 440³, 442³, 450³, 454³, 498³, 499⁶</td></tr><tr><td>12</td><td>INST 212³, 220³, 260³, 280³</td><td></td><td></td></tr><tr><td>*3 or 6</td><td>EDUC 210⁶, 230³</td><td></td><td></td></tr><tr><td></td><td><i>Stage II</i></td><td></td><td></td></tr><tr><td>12</td><td>INST 290³, 320³, 330³, 350³</td><td></td><td></td></tr><tr><td>3</td><td>INTE 296^{3**}</td><td></td><td></td></tr><tr><td></td><td><i>Stage III</i></td><td></td><td></td></tr><tr><td>6</td><td>INST 420³, 430³</td><td>120</td><td>BA Specialization in Early Childhood and Elementary Education</td></tr><tr><td>*3 or 6</td><td>EDUC 230³, 422³, 426³, 440³</td><td>81</td><td><i>Group A</i></td></tr><tr><td></td><td>*Students must complete a total of nine EDUC credits, three or six in <i>Stage I</i> and three or six in <i>Stage III</i>.</td><td></td><td>ARTE 201³; EDUC 210⁶, 211³, 222³, 260³, 262³, 264³, 295³, 296³, 297³, 301³, 380³, 381³, 382³, 387³, 388³, 395³, 396³, 400³, 445³, 450³, 454³, 493³, 494³, 495³, 496³</td></tr><tr><td></td><td>**Any equivalent three credits satisfy this component of the program. See §200.7.</td><td></td><td></td></tr></table>		42	BA Major in Information Studies	24	Minor in Education		<i>Stage I</i>	24	Chosen from EDUC 201 ⁶ , 210 ⁶ , 230 ³ , 241 ³ , 305 ³ , 306 ³ , 317 ³ , 321 ³ , 324 ³ , 398 ³ , 399 ⁶ , 405 ³ , 416 ³ , 417 ³ , 422 ³ , 423 ³ , 426 ³ , 427 ³ , 428 ³ , 429 ³ , 440 ³ , 442 ³ , 450 ³ , 454 ³ , 498 ³ , 499 ⁶	12	INST 212 ³ , 220 ³ , 260 ³ , 280 ³			*3 or 6	EDUC 210 ⁶ , 230 ³				<i>Stage II</i>			12	INST 290 ³ , 320 ³ , 330 ³ , 350 ³			3	INTE 296 ^{3**}				<i>Stage III</i>			6	INST 420 ³ , 430 ³	120	BA Specialization in Early Childhood and Elementary Education	*3 or 6	EDUC 230 ³ , 422 ³ , 426 ³ , 440 ³	81	<i>Group A</i>		*Students must complete a total of nine EDUC credits, three or six in <i>Stage I</i> and three or six in <i>Stage III</i> .		ARTE 201 ³ ; EDUC 210 ⁶ , 211 ³ , 222 ³ , 260 ³ , 262 ³ , 264 ³ , 295 ³ , 296 ³ , 297 ³ , 301 ³ , 380 ³ , 381 ³ , 382 ³ , 387 ³ , 388 ³ , 395 ³ , 396 ³ , 400 ³ , 445 ³ , 450 ³ , 454 ³ , 493 ³ , 494 ³ , 495 ³ , 496 ³		**Any equivalent three credits satisfy this component of the program. See §200.7.		
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- 12 *Group B*
Chosen from EDUC 230³, 305³, 321³,
383³, 385³, 389³, 405³, 406³, 422³, 423³,
426³, 427³
- 27 *Group C*
Students must also take a minimum of
27 credits outside the Department of
Education

NOTE 1: This program is open to full-time students only. In addition to the application submitted to the University, Specialization applicants MUST complete an additional application which may be obtained from the Early Childhood and Elementary Education secretary.

NOTE 2: Upon successful completion of the BA Specialization in Early Childhood and Elementary Education program and application to the Student Service Centre, students may be recommended to the Québec Teachers Certification Service for a Québec teaching permit, valid for teaching kindergarten and levels 1–3.

To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must:

1. achieve at least a "B" grade in each of the following practicum courses: EDUC 295, 296, 297, 395, 396, 493, 494, 495, 496; and
2. achieve at least a "C+" grade in each of the following methods courses: EDUC 222, 301, 380, 381, 382, 383, 385, 387, 388, 389.

Students who obtain a grade that is below the above required level will be placed on conditional standing within the program and will be so informed in writing. Students will be allowed to repeat the course(s) in question only once in order to achieve the required grade. (For the status of this grade as part of the student record, see §16.3.12.)

Students who fail to achieve the above minimum grades in two internships/methods courses (i.e. failing the same internship/methods course twice or two different internships/methods courses) will be required to withdraw from the Early Childhood and Elementary Education Specialization program (see §16.3.12).

NOTE 3: Students who intend to teach Catholic religious and moral instruction are advised to take EDUC 383 or 389 in addition to THEO 201, 204, or 211.

42 BA Major in Child Studies

- 18 EDUC 210⁶, 211³, 260³, 262³, 374³
- 12 Chosen from EDUC 305³, 306³, 317³,
405³, 406³, 416³, 417³, 490³, 491³, 498³,
499⁶
- 6 Chosen from EDUC 230³, 241³, 321³,
324³, 422³, 423³, 426³, 427³, 428³, 429³,
440³
- 6 Chosen from a cognate discipline
(courses to be designated)

CERTIFICATE IN EDUCATION*

The Department of Education offers a 30-credit program leading to the Concordia University Certificate in Education and certification from the Provincial Department of Education.

NOTE: This program is restricted to individuals presently employed in a recognized educational institution in Québec and holding a provisional teaching authorization.

Admission Requirements

1. Evidence of full-time employment with a recognized institution in Québec.
2. Possession of a Québec provisional teaching authorization.

Admission limited.

Courses

EDUC 201⁶

EDUC 445³

EDUC 210⁶

EDUC 471⁶

either EDUC 480³, 481³, or an equivalent course in teaching methodology.

Six additional undergraduate credits in Education chosen in consultation with the director of the program.

Students may transfer into the Certificate program up to 12 credits earned in an incomplete degree or Certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

NOTE:

1. *The student must meet the minimum scholarship requirements set by the Provincial government before being recommended for certification. See the conditions for certification following the BA Specialization in Early Childhood and Elementary Education above.*
2. *This program is not open to teachers of vocational subjects.*

**Admission suspended for 2001-02.*

For other programs which may be of particular interest to teachers, see §23.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Education

EDUC 201 *The Nature and Function of Teaching* (6 credits)

An introduction to the purpose, theories, and methods of teaching.

EDUC 210 *Psychology of Education* (6 credits)

This course introduces students to a broad range of content in educational psychology, including its scope and methods, learning motivation, growth and development, adjustment, individual differences, guidance, and concept of self.

EDUC 211 *Child Development* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization, or Major in Child Studies. This course provides an overview of the social, emotional, cognitive, and physical development of children from birth to age 12 and an in-depth examination of selected critical issues. The implications of developmental needs in relation to preschool elementary education are discussed.

EDUC 222 *Exploring Movement with Children* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization. From a multi-disciplinary perspective, this course examines the following topics: the relationship between movement and self-knowledge, psychomotor development, and the role of physical activity in primary education. The course addresses the teacher's role in incorporating movement into the curriculum for all children, including those with special needs through the use of specific techniques and activities.

EDUC 230 *Introduction to Philosophy of Education* (3 credits)

This course introduces the student to the content and form of several major educational theories, and to conceptual and logical procedures of philosophizing about education, with particular reference to teaching and learning.

EDUC 241 *Education in Western Civilization* (3 credits)

An introduction to selected major thinkers and systems of thought in (and impinging on) education from Antiquity to the twentieth century. Emphasis is placed on thought and practice in the context of significant cultural, socio-economic, political, and religious developments.

NOTE: Students who have received credit for EDUC 441 may not take this course for credit.

EDUC 260 *Historical and Philosophical Foundations of Early Childhood Education* (3 credits)

Prerequisite: Thirty credits or permission of the Department; enrolment in Early Childhood and Elementary Education Specialization, or Major in Child Studies. This course is an introduction to the historical and philosophical foundations of early childhood education. The development of institutions for the care and education of young children is discussed in relation to changes in the family, concepts of childhood, and educational theories. Students use methods of historical and philosophical inquiry to examine current issues in early education, including school readiness, early literacy, integration, multiculturalism, and public policy. The objective is to provide students with the basis for identifying and critiquing problems in education.

EDUC 262 *The Family and the Child* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization, or Major in Child Studies. Students are introduced to developmental, psychological, and sociological aspects of the child and family. Emphasis is placed on the diversity of family structures, the transition to parenthood, child-rearing patterns, and the relationship between home and school. Problems and issues of the family, such as divorce, child and spouse abuse, dual-worker families are also addressed.

EDUC 264 *Communication: Child, Parent and Teacher* (3 credits)

Prerequisite: Thirty credits or permission of the Department; enrolment in Early Childhood and Elementary Education Specialization. This course focuses on the role parents play in the various stages of the child's academic, social, and emotional development. The format for this course is unique in that parents of the children in our observation nursery are involved, and students interact with them by conducting and participating in parent-teacher seminars. Topics include parenting, the impact of the family on the child's classroom behaviour, child abuse, cultural issues, disciplinary measures at home and in school, the coordination of home-and-school academic goals, and achievement motivation.

EDUC 295 *Practicum I: Prekindergarten Teaching* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; students must be enrolled in EDUC 296 in the same semester and in their first year of the ECEE program. This practicum gives students first-hand knowledge of the importance of early

education. It permits students to develop preliminary skills in observing, assessing, and meeting the needs of individual children, articulating educational objectives, working effectively with small groups, and planning and implementing a play-based curriculum. Students are placed in a prekindergarten class one day a week for a total of 60 hours.

NOTE: Students who have received credit for EDUC 271 may not take this course for credit.

EDUC 296 *Prekindergarten Teaching Seminar* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; students must be enrolled in EDUC 295 in the same semester. This course supports EDUC 295 by offering a thorough introduction to theoretical and applied aspects of early childhood education through a weekly seminar consisting of lectures, discussions, and video presentations on such topics as the educational and developmental needs of young children, models of education, the role of the teacher, play-based curriculum and instruction, health and safety issues, and the design of appropriate prekindergarten learning environments.

NOTE: Students who have received credit for EDUC 272 may not take this course for credit.

EDUC 298 *Selected Topics in Education* (3 credits)

EDUC 299 *Selected Topics in Education* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EDUC 301 *Integrating Computers into the Elementary Classroom* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization. This course provides an introduction to theoretical and practical knowledge regarding the use of computers in elementary school classrooms. Assignments are designed to provide students with hands-on experience with the computer. Topics include social interaction and equity, problem-solving skills, software evaluation, interactive technologies, and curriculum planning.

NOTE: Students are expected to have some basic computer skills (at least wordprocessing) prior to enrolling in this course. Students with no previous experience in using computers are advised to take INTE 290 before enrolling in this course.

EDUC 305 *Technology for Educational Change* (3 credits)

This course provides an introduction to salient advances in the theory, research, and practice of educational technology. The following topics are typically covered: traditional media survey,

systems approach and instructional design, origins of information explosion, computer technologies of instruction (e.g. interactive video), distance education, and trends in educational technology research and evaluation.

EDUC 306 *Computers and Computing in Education* (3 credits)

Prerequisite: INTE 290, or permission of the Department. This course is an introduction to educational computing. Topics covered include the evaluation and selection of instructional software, and using the computer as a tool for processing information with existing applications (e.g. spreadsheets, databases, authoring languages, graphics) in an educational context. Laboratory work outside the class (IBM-PC or compatible).

EDUC 317 *The Urban Child* (3 credits)

This course concentrates upon the life of the inner-city child and the concomitant influences upon their development in and out of the classroom. Students are instructed in how to view the urban area from the child's perspective, through field assignments in inner-city schools or recreation centres. Lectures by social workers, police officers of the youth section, legal aid counsellors, and inner-city teachers heighten the awareness of students to the environment in which the inner-city child lives.

EDUC 321 *Sex Role Socialization in the School* (3 credits)

This course focuses upon how children at the elementary- and secondary-school level are socialized for different work roles, and how work segregation has occurred on the basis of this process. The role of schools and curriculum is examined in relation to cultural changes in social roles.

EDUC 324 *Patterns of Educational Culture* (3 credits)

This course is an introduction to the variety of cultural settings in which formal schooling and informal education socialization take place. The cultural milieu of education, both inside the classroom and outside, in the family, the neighbourhood, the market-place, and the political arena is the focus of readings and lectures. The aim of this course is to immerse the student in the concepts of anthropology and education in the broadest sense. It is hoped that students become sensitized to the concept of culture, cultural assimilation, enculturation, socialization, informal, non-formal, and formal educational systems, open and closed societies, and cross-cultural comparison.

EDUC 371 *Practicum II: Classroom Interaction Dynamics* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 30 credits including EDUC 271, 272. This course is

designed to encourage both systematic and anthropological observation of children in large and small groups in the classroom. Interaction between the child and the teacher as well as peer group interaction are examined. Sociolinguistics, verbal and non-verbal communication, and teacher expectations are topics covered. The purpose of this course is to heighten students' awareness of effective communication strategies and classroom interaction patterns. Classroom observation and student participation are the means by which topics are handled in the course. Students conduct guided observations in recognized educational institutions (45 hours) to learn about classroom interactions under the supervision of the course instructor.

EDUC 373 *Practicum III: Observation, Evaluation and Analysis of Teaching* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 30 credits including EDUC 271, 272; students must be enrolled in EDUC 375 in the same semester. Students are given the opportunity to observe, evaluate, and implement age appropriate curricula in recognized educational institutions (K-6; 32 hours). They develop teaching skills which include effective questioning techniques, classroom management, activity planning, and self-evaluation. In this internship, students are required to perfect these skills by means of video-taping their teaching. The tapes are reviewed and discussed in class with the course instructor and fellow students.

EDUC 374 *Child Studies Practicum* (3 credits)

Prerequisite: 30 credits in the Major program. This course is designed to provide students with training in observation and evaluation procedures. Students study children in a variety of child-oriented environments and programs. Instruction focuses on evaluative methodology, e.g. observational methods and interactional analyses. Students are required to complete a one half-day per week internship in addition to the regularly scheduled class time. Appropriate field placements for this course include recreation/community centres, hospitals, daycare centres, libraries, museums, fine arts centres.

NOTE: Students who have received credit for EDUC 371 may not take this course for credit.

EDUC 375 *Observation, Evaluation and Analysis of Teaching Seminar* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 30 credits including EDUC 271, 272; students must be enrolled in EDUC 373 in the same semester. This course supports EDUC 373 in that it focuses on the development and evaluation of curricula and the appropriateness of various classroom management techniques. Students learn how to conduct a diagnostic observation to

create a dynamic profile of the child and how to prepare evaluation reports for parent-teacher communication. Students meet to discuss internship experiences, teaching philosophies, evaluation techniques, and to exchange information about program implementation.

EDUC 380 *Teaching Language Arts I* (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course enables students to acquire the necessary skills for developing a stimulating and appropriate language arts program for kindergarten and primary grades. Current theories of literacy development and implications for planning and instruction are addressed. The course focuses on listening, speaking, reading, and writing, emphasizing the integration of language arts activities into other subject areas.

EDUC 381 *Teaching Language Arts II* (3 credits)

Prerequisite: 30 credits including EDUC 380; enrolment in Early Childhood and Elementary Education Specialization. This course is a continuation of EDUC 380 with special emphasis on teaching language arts in grades 3-6. Students become familiar with MEQ program guidelines, and various ways to organize and evaluate their implementation.

EDUC 382 *Teaching Science Concepts in the Elementary Classroom* (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course examines areas of science which are relevant to elementary education and emphasizes the development of the spirit of scientific enquiry. Resource materials, teaching methodology, and classroom activities are examined and evaluated in light of the MEQ guidelines. Assignments emphasize developing activities for classroom use.

EDUC 383 *Promoting Moral and Spiritual Attitudes and Values in Young Children* (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course is designed to introduce the early childhood teacher to the various issues involving the development of moral judgement and reasoning in the young child. Cultural, social, cognitive, and emotional factors influencing the growth of morality are discussed. The major focus is on examining methods and techniques to enhance the personal development of positive social behaviours (i.e. helping, sharing, caring, etc.) in preschool and primary level children.

EDUC 384 *Exploring the Human Sciences with the Preschool and Primary Age Child* (3 credits)

Prerequisite: 30 credits; enrolment in Early

Childhood and Elementary Education Specialization. This course examines the teaching of the human sciences to young children.

EDUC 385 *Teaching a Second Language to Elementary School Children*
(3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course is designed to give teachers a background in current theories of language acquisition and second language learning. Teaching methodologies such as immersion, enrichment, and core/complementary curricula are studied and resource materials are examined and evaluated. Assignments include the development of appropriate classroom activities at the elementary level.

EDUC 387 *Teaching Mathematics I*
(3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. Programs and methodologies for teaching numerical concepts typically acquired by the preschooler and the primary child are studied and evaluated. Relevant resource materials are examined and assignments focus upon development of activities for the classroom.

EDUC 388 *Teaching Mathematics II*
(3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course concentrates on topics such as geometry, classification, measurement, mathematical language, and the use of the calculator according to the MEQ elementary mathematics program guidelines. The use of manipulative aids in instructing children is explored and illustrated. Relevant resource materials are examined and assignments focus upon the development of activities for classroom use.

EDUC 389 *Catholic Moral and Religious Teaching in the Context of Québec Schools* (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course is designed to provide early childhood educators with the skills to develop a program of Catholic moral and religious instruction within the context of Québec schools. The school curriculum, resource materials, and teaching methodologies for the primary and preschool child are studied.

EDUC 398 *Selected Topics in Education*
(3 credits)

EDUC 399 *Selected Topics in Education*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EDUC 400 *Teaching Across the Curriculum* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; EDUC 380. Using language arts and the social sciences as the starting point, this course outlines different models for integrating school subjects in curriculum programming. Special attention is given to social science methodology, thematic planning and project work, and to the use of literature and drama. Students examine the links between the different programs of study developed for Québec schools by the MEQ, and their overall implications for curriculum planning.

EDUC 405 *Television in the Lives of Young Children* (3 credits)

Prerequisite: 30 credits. This course examines the effects of television on children from a cognitive-developmental perspective. Learning theory, production techniques, cognitive theory (information processing) are the basis around which the communication process between the child and the media is examined. Both the positive and negative effects of television on children are considered. The concept of media literacy and classroom use of television is also discussed.

EDUC 406 *Educational Aspects of Physical Activity, Health and Wellness* (3 credits)

Prerequisite: EDUC 210 or PSYC 200 or equivalent; 30 credits. This course examines the promotion of physical health and well-being of both adults and children. Using an educational approach, principles from the Psychology of Sports, including stress management, motivation, mental training and goal-setting serve as the foundation from which students learn how to enhance sport or exercise performance and general lifeskills.

NOTE: Students who have received credit for this topic under an EDUC 398 number may not take this course for credit.

EDUC 416 *Education of the Gifted*
(3 credits)

Prerequisite: EDUC 210. This course discusses the special educational problems of gifted children. It also assesses the effectiveness of the techniques usually employed to deal with these problems.

EDUC 417 *Education of the Disadvantaged Child* (3 credits)

Prerequisite: 30 credits. This course deals with issues associated with teaching disadvantaged children. Social, emotional, cognitive, and familial problems are discussed and techniques for coping with these problems are presented.

EDUC 422 *Sociology of Education I*
(3 credits)

Prerequisite: 30 credits. This course emphasizes sociological concepts and their application to the study of schooling. The focus is on the education

system in relation to familial, economic, and political aspects and how these affect social class differentials in educational achievement and social status position.

NOTE: Students who have received credit for EDUC 421 may not take this course for credit.

EDUC 423 *Sociology of Education II*
(3 credits)

Prerequisite: EDUC 422. This course considers how a particular sociological viewpoint contributes to our understanding of school life. Topics include family, socialization patterns, teacher and pupil perspectives, and how these are interrelated.

NOTE: Students who have received credit for EDUC 421 may not take this course for credit.

EDUC 426 *Comparative Education I*
(3 credits)

Prerequisite: Six credits in Education. This course undertakes the study of the impact of political and cultural differences upon educational systems (for example, the impact of language differences, nationalism, colonialism, neocolonialism, political socialization). The approach is comparative, with particular emphasis on contrasting educational systems and practice in Western nations (Canada, the United States, United Kingdom, or Western Europe); Russia; and China or other Third-World nations.

EDUC 427 *Comparative Education II*
(3 credits)

Prerequisite: Six credits in Education. This course examines the sources and impacts of educational change from a comparative perspective. Topics include pedagogical alternatives; socio-political alternatives; educational implications of technological change and economic policy; policies of elitism and egalitarianism. Methods include comparative case study and analysis of specific theories of educational innovation.

EDUC 428 *Philosophy of Education: Concepts and Issues* (3 credits)

Prerequisite: Three credits at the university level in Philosophy, or EDUC 230. The course considers the application of philosophical method to aspects of educational theory or practice, e.g. educational aims, teaching methods, concepts which occur in educational discourse, or educational controversies.

EDUC 429 *Philosophy of Education: Educational Philosophers and Movements* (3 credits)

Prerequisite: Three credits at the university level in Philosophy, or EDUC 230. The course undertakes the study of a philosopher or school of philosophy whose works include significant educational reference or implication: e.g. Plato, Aristotle, Rousseau, Dewey, Marxism, utilitarianism, modern analytical philosophy.

EDUC 431 *Honours Essay in Education*
(6 credits)

Open to third-year students in Honours in Education and Philosophy (or to others by permission of the Department).

EDUC 432 *Seminar in Epistemology and Education* (3 credits)

Prerequisite: EDUC 428 or 429, or permission of the Department. Theories of knowledge are considered in this course, with special attention being given to the bearing of such topics as perception, evidence, truth, knowledge, and belief as relating to educational thought and practice. Students are expected to become familiar with recent periodical and other literature in the field.

EDUC 433 *Seminar in Ethics and Education* (3 credits)

Prerequisite: EDUC 428 or 429, or permission of the Department. This course examines the principles and methods of moral justification in education. They are referred to the writing of main authors and recent periodical literature.

EDUC 434 *Seminar in Aesthetics and Education* (3 credits)

Prerequisite: EDUC 428 or 429, or permission of the Department. The nature of aesthetic value and experience, and theories of art and beauty are examined. The development of the emotions and imagination, and their functions in aesthetic awareness are central concerns of this course. Students are expected to become familiar with the relevant literature in the field.

EDUC 435 *Seminar in Philosophy and Education* (3 credits)

Prerequisite: EDUC 428 or 429, or permission of the Department. This is an advanced seminar in philosophical analysis and theory, in which students present papers on, and conduct discussions about, educational concepts, aims, and practices. Students are expected to become familiar with the periodical and other literature in the areas under discussion.

EDUC 440 *History of Education, Thought and Practice* (3 credits)

Prerequisite: 30 credits. This course focuses on a selected theme, school of thought, or movement in education and educational thought such as the education libertarians from Rousseau to Holt, the evolution of the curriculum, the origins of public education.

NOTE: Students who have received credit for EDUC 441 may not take this course for credit.

EDUC 442 *Education in Canada* (3 credits)

Prerequisite: Six credits in Canadian history. It is advisable that students have a reading knowledge of French. This course studies the history of Canadian education and, more particularly, the history of education in Québec.

EDUC 445 *Education in Québec* (3 credits)

Prerequisite: 30 credits in a teacher certification program, or holder of a provisional teaching authorization, or permission of the Department. This course covers the history, the contemporary movements, and the structures of Québec education. The historical section covers the period from 1608 until the present. Topics included are the legislation, regulations, rules, and directives pertaining to the respective roles of the Ministry of Education, the school boards, the teachers, the parents, and the students in Québec's educational system.

NOTE: Because this is a required course for all individuals enrolled in a Québec program of teacher training, the content is controlled by the Ministry of Education.

EDUC 450 *The Inclusive Classroom: Educating Exceptional Children* (3 credits)

Prerequisite: 30 credits including EDUC 210 or 211. This course focuses on the education of children with special needs. Emphasis is placed on ways in which classroom teachers can provide appropriate help or instruction to meet the needs of exceptional children. Topics include identification and assessment of learning needs; adaptation of curriculum and activity design; service delivery models; parent-professional relationships; legislative policies.

EDUC 454 *Diversity in the Classroom* (3 credits)

Prerequisite: 30 credits including EDUC 210 or 211. Students examine the implications of diversity in the classroom for teaching, curriculum, and children's educational experience. Various theoretical approaches are analysed, including critical pedagogy, multicultural education, and intercultural education. The importance of inclusive curricula is discussed.

EDUC 471 *Supervised Internship* (6 credits)

This course is offered only to students enrolled in the Certificate in Education program. Teaching internship is carried out in the school where the student is employed. The students are supervised and their teaching performance evaluated. The students are expected to demonstrate positive evidence of teaching competence and professional behaviour.

EDUC 473 *Practicum IV: Kindergarten/Primary Teaching* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 60 credits including EDUC 371, 373, 375; students must be enrolled in EDUC 474 in the same semester. This internship is a twelve-week (300 hours) supervised student-teaching experience in a full-day kindergarten and/or primary classroom. Students share in the daily work of their cooperating teachers, and progress gradually from being participant observers working with

small groups to taking charge of the whole class as independent, creative practitioners. Students perfect their skills in activity planning, intervention strategies, the evaluation of student learning, and the management of classroom routines.

EDUC 474 *Kindergarten/Primary Teaching Seminar* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 60 credits including EDUC 371, 373, 375; students must be enrolled in EDUC 473 in the same semester. This seminar complements EDUC 473 by providing the opportunity, means, and impetus for students to reflect critically on their teaching philosophy and practice. Topics include the development of appropriate and stimulating learning environments, MEQ kindergarten and primary program guidelines, planning and implementation of learning centres, teaching the "whole" child, teacher-parent relationships, and other current issues in primary education.

EDUC 475 *Practicum V: Elementary Teaching* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 60 credits including EDUC 473, 474; students must be enrolled in EDUC 476 in the same semester. Students are placed in an elementary classroom (grades 3–6) for an eight-week (200 hours) supervised student-teaching assignment. The internship provides students with further opportunities to develop advanced skills in curriculum planning and implementation, preparing and evaluating appropriate materials, monitoring student progress, and the individualization of instruction. A further aim of the internship is to promote the development of the student's own teaching style, and skills in self-evaluation.

EDUC 476 *Elementary Teaching Seminar* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 60 credits including EDUC 473, 474; students must be enrolled in EDUC 475 in the same semester. This seminar supports and complements EDUC 475. Its purpose is to discuss, review, and analyse relevant classroom issues in the context of the teaching-learning environments in which the students are working. Topics include inclusivity, diversity in the classroom population, curriculum development, involvement of parents in their children's education, and the facilitation of pro-social behaviour in the elementary school child. This course uses small group discussions, films, analysis of case studies, and student presentations.

EDUC 480 *Special Methods of Teaching — Elementary* (3 credits)

This course is offered only to students enrolled in the Certificate in Education program. It deals with methods of teaching in the elementary school. Emphasis is placed on the practical application of educational theories.

**EDUC 481 *Special Methods of Teaching*
— *Secondary* (3 credits)**

This course is offered only to students enrolled in the Certificate in Education program. This course deals with methods of teaching in a high school subject. The course is designed to suit the individual student's field of specialization.

EDUC 490 *Children with Health Problems and Handicaps I* (3 credits)

Prerequisite: EDUC 211 or equivalent; 30 credits in Education, or permission of the Department. This course offers a theoretical and practical introduction to the challenges facing children who have various disabilities or chronic illnesses. The course addresses the question: how can families, educators, and others work towards the goal of equitable opportunity for these children? Topics include attitudes, the normalization principle, education, and life in the mainstream.

EDUC 491 *Children with Health Problems and Handicaps II* (3 credits)

Prerequisite: EDUC 490, or permission of the Department. This course is an exploration of children's experiences with illness, disability and health or medical care, and specific interventions which can foster coping, healthy development, and family well-being. Topics include cognitive and emotional preparation for stress-provoking events, the therapeutic use of play, creative expression, and special literature for children and youth. Laboratory work outside the class is required.

EDUC 498 *Advanced Topics in Education* (3 credits)

EDUC 499 *Advanced Topics in Education* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Information Studies

INST 212 *Information in Society* (3 credits)

This course provides a theoretical and historical introduction to topics such as the nature and definition of information, its role in society and the economy, how technology has impacted on the accessibility, distribution, and use of information and information policy. Basic concepts and vocabulary, an introduction to the information professions and the literature of the field are covered.

INST 220 *Introduction to Information-Based Organizations* (3 credits)

This course introduces students to basic management and organizational theory and practice within the information-based organization. It focuses on the influence of information on

functions at the various organizational levels, and examines the place of the organization within a global economy.

INST 250 *Introduction to Library Research Practices* (3 credits)

This course is designed to introduce students to basic library research practices. It familiarizes students with a variety of information sources in both print and non-print formats. Emphasis is placed on a systematic search strategy in the use and evaluation of these information tools. Topics such as outlining and bibliographic format are covered as part of the library research process.

NOTE: Students who have received credit for LIBS 250 may not take this course for credit.

INST 260 *Organization of Information I* (3 credits)

This course covers the theory and principles required to describe and analyse information in print and electronic media. Students review the evolution of various guiding principles and methods employed in the organization of information including international standards and codes. The course focuses on the identification and analysis of the essential descriptive elements common to all types of records, the use of bibliographic utilities and data transfer.

INST 280 *Methods of Information Retrieval I* (3 credits)

This course examines the theory, concepts, and skills involved in information storage and retrieval. Emphasis is placed on an understanding of data structures and the organization of information in a variety of print and electronic media. Students focus on the analysis of the problem, selection of appropriate sources, search strategy development, and comparison and evaluation of different types of resources.

INST 290 *Database Systems for Information Management* (3 credits)

This course provides an introduction to different types of databases, such as hierarchical and relational, and their corresponding file organization and data structures. Platforms and operating systems are presented. An overview of existing software for each type of database is examined and evaluation criteria for assessing software is included.

INST 298 *Selected Topics in Information Studies* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

INST 320 *Organization of Information II* (3 credits)

Prerequisite: INST 260. This course further develops the theory and principles required to

describe and analyse information in print and electronic media. Part II focuses on indexing and abstracting principles, classification systems, and subject analysis. It includes comparison and evaluation of various systems according to the subject and format of documents to be analysed. Thesaurus design and construction are covered.

INST 330 *Basic Programming for Information Systems* (3 credits)

Prerequisite: INTE 291 or equivalent. Programming theory and techniques relevant to information systems are studied. Students are introduced to an object-oriented programming language.

INST 350 *Methods of Information Retrieval II* (3 credits)

Prerequisite: INST 280. This course covers the theory and application of more advanced concepts in online and Internet searching with special emphasis on Education and complementary disciplines (i.e. Sociology, Psychology, and such). Bibliographic, fulltext and numeric databases are studied. Emphasis is placed on search strategy design and on critical evaluative techniques to analyse the data retrieved. Additional topics include basic telecommunications, communications software, and electronic document delivery.

INST 398 *Selected Topics in Information Studies* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

INST 420 *User Behaviour in the Information Environment* (3 credits)

Prerequisite: INST 320, 350. This course examines common information-seeking behaviours of users from a variety of populations such as students, researchers, and practitioners. Topics covered include information-seeking behaviours and use of information resources. Students examine how information channels are selected and used, expectations of and problems encountered by information seekers, and the impact of technologies on the information-seeking process.

INST 430 *Theory and Practice of Information Dissemination* (3 credits)

Prerequisite: INST 350. Principles involved in filtering, synthesizing, and presenting information form the basis of this course. Issues such as copyright, plagiarism, and the role of proper documentation are covered. Emphasis is placed on analysing user needs to determine appropriate presentation formats. The course includes the design and execution of several projects with text and graphics using appropriate software.

INST 498 *Advanced Topics in Information Studies* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.090.1
Adult Education

*Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.*

30 Certificate in Adult Education

Certificate Admission Requirements

General admission requirements are listed in §13. Applicants will be interviewed prior to admission.

Students must take:

- 6 ADED 201³, 202³
- 15 Chosen from the Adult Education (ADED) offerings
- 3 Chosen from cognate courses with the permission of the program director
- 6 ADED 496³, 497³, Integrative Internships I and II

Students may transfer into the Certificate program up to 12 credits earned in an incomplete degree

or Certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

24 Minor in Adult Education

- 6 ADED 201³, 202³
- 18 Chosen from Adult Education (ADED) course offerings with the prior approval of the Adult Education coordinator.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ADED 201 *Concepts and Principles of Adult Education* (3 credits)

This course consists of an overview of the field of adult education as a field of study with emphasis given to its philosophy, objectives, historical development, and the nature of adult learners. It

also examines adult education as a field of practice with emphasis given to methods, techniques, roles, and competencies. This course stresses active student participation and self-directedness.
NOTE: Students who have received credit for ADED 200 may not take this course for credit.

ADED 202 *The Scope and Nature of Adult Education Programs* (3 credits)

This course is designed to help students develop an understanding of the scope and nature of adult education programs. Emphasis is placed on existing programs, and institutions and agencies providing them. The course stresses active student participation and self-directedness.

NOTE: Students who have received credit for ADED 200 may not take this course for credit.

ADED 220 *Adults as Learners* (3 credits)

This course examines the unique physiological, psychological, and sociological characteristics of adults, their influence on adult learning and development, and their implications for educational intervention. Attention is given to changes which occur at various stages of the adult life cycle, and particularly to the dimensions which affect the adult's self-concept and orientation to learning, the motivations, needs, and interests which cause adults to participate in educational activities.

ADED 230 *Roles and Competencies of Adult Educators* (3 credits)

The purpose of this course is to review the state of professionalization of adult education. General skills, knowledge, and attitudes expected of adult educators regardless of the setting in which they work are examined. In addition, according to the participants' needs and interests, an opportunity is given to explore competencies related to the particular roles of, e.g., administrators, program developers, trainers, leaders, instructors, counsellors, and volunteer workers.

ADED 240 *Introduction to Research in Adult Education* (3 credits)

This course is designed to introduce students to how to gain access to and utilize major information sources in adult education. In addition, the course examines research interests and problem areas studied in adult education and related fields, along with current trends and various methods of enquiry used.

ADED 298 *Selected Topics in Adult Education* (3 credits)

ADED 299 *Selected Topics in Adult Education* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ADED 333 *Methods and Techniques for Facilitating Adult Learning* (3 credits)

This course is designed to give adult educators an opportunity to practise and improve their skills in facilitating adult learning. Different models of educational processes and optimal conditions for promoting adult learning are examined; attention is given to case studies, role plays, and simulation methods and techniques, as well as to

individualized learning formats.

NOTE: Students who have received credit for ADED 330 or 331 may not take this course for credit.

ADED 344 *Design of Adult Learning Projects* (3 credits)

The purpose of this course is to assist participants in developing a clear working concept of various models for planning and designing adult learning projects. To facilitate this understanding, the different steps of the process are closely examined and discussed. Participants are given an opportunity to design and conduct a learning activity in the area of subject matter speciality. A systems approach, including methods for evaluating the design of the learning project is emphasized.

NOTE: Students who have received credit for ADED 340 or 341 or 343 may not take this course for credit.

ADED 345 *Evaluating Adult Learning Projects* (3 credits)

The purpose of this course is to assist participants in developing a clear working concept of various models for assessing the effectiveness of adult learning projects. The course emphasizes a systematic approach to evaluation, techniques for collecting information and providing feedback to program operation and impact. Participants are given the opportunity to conduct an evaluation of an adult learning project in the area of subject matter speciality.

NOTE: Students who have received credit for ADED 342 or 343 may not take this course for credit.

ADED 351 *Introduction to Administration of Adult Education* (3 credits)

This course is designed to develop a better understanding of the principles of organization and administration as they relate to various institutions, government agencies, schools, and hospitals. The course also examines the evolving relationships of administrative theory and practice.

ADED 370 *Workshops for Adult Educators* (3 credits)

These workshops examine a number of topics and problems related to the field of adult education. The issues considered may differ from year to year and will be stated in the Undergraduate Class Schedule. The workshop format is designed to provide adult educators with learning opportunities that are flexibly scheduled or in the form of a one-week intensive seminar.

ADED 398 *Selected Topics in Adult Education* (3 credits)

ADED 399 *Selected Topics in Adult Education* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ADED 410 *Adult Education in Canada and Québec* (3 credits)

The purpose of this course is to examine the historical development and current state of adult education in Canada, with special reference to Québec. Various factors which influenced the development of adult education in our society are explored; the focus is on present status, role and structure, and socio-cultural and philosophical underpinnings of the field.

ADED 412 *Concepts and Values in Adult Education* (3 credits)

This seminar is designed to encourage adult educators to reflect upon and question what one is engaged in and why. A selection of conceptual and philosophical issues underlying adult educational practice is critically examined and discussed. Attention is given to the meaning of words, the nature of ideas and values, the implications of assumptions and principles which are deemed specific in the sphere of the education of adults.

ADED 440 *Issues in the Practice of Adult Education* (3 credits)

The purpose of this seminar is to study and discuss current issues relating to the field and profession of adult education in general, along with more specific and local concerns. Group and individual interests have an important bearing on the design of this course.

ADED 450 *Adulthood and the Process of Educational Change* (3 credits)

This course examines the factors which promote and inhibit educational change in adults. It provides a basis for understanding and intervening with adults in order to facilitate their taking greater responsibility for managing their own learning and for increasing effectiveness.

ADED 496 *Integrative Internship I* (3 credits)

Prerequisite: ADED 201; ADED 202 and 15 credits in the program. This internship is designed to assist individual students in achieving a synthesis of their own experiential learning in light of acquired knowledge, skills, values, and attitudes through the clarification of personal aims and the philosophy of adult education. Students will normally enrol in this internship near the end of their program.

NOTE: Students who have received credit for ADED 495 may not take this course for credit.
NOTE: Students will normally enrol in ADED 496 near the end of their program.

ADED 497 *Integrative Internship II* (3 credits)

Prerequisite: Successful completion of ADED 496. This internship is designed to extend the personal aims and philosophy of adult education arrived at in Integrative Internship I, and engage in a special project in an adult education facility where supervision is provided by the host institution.
NOTE: Students who have received credit for ADED 495 may not take this course for credit.

ADED 498 *Advanced Topics in Adult Education* (3 credits)

ADED 499 *Advanced Topics in Adult Education* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.100

ENGLISH

Faculty	<i>Chair</i> TERENCE BYRNES	JILL DIDUR ANDRE FURLANI JOHN MILLER KEVIN PASK EVE SANDERS KATE STERNS
	<i>Professors</i> MALCOLM FOSTER JUDITH S. HERZ	
	<i>Associate Professors</i> ROBERT ALLEN MICHAEL BRIAN MARY DI MICHELE MARCIE FRANK BINA FREIWALD LAURA GROENING NICOLA NIXON EYVIND C. RONQUIST JOHN R. SORFLEET	<i>Writer-in-Residence</i> Announced yearly in June
	<i>Assistant Professors</i> STEPHANIE BOLSTER JASON CAMLOT	<i>Professors Emeriti</i> HENRY BEISSEL HOWARD FINK PATRICIA MORLEY
		<i>Adjunct Professors</i> EDWARD PECHTER G. DAVID SHEPS
Location	<i>Sir George Williams Campus</i> J.W. McConnell Building, Room: LB 501 (514) 848-2340	
Department Objectives	The Department of English offers studies in literature, creative writing, and composition. Literary studies encourage appreciation and critical analysis of texts in their historical, literary, and cultural contexts. The Creative Writing program allows students to learn the craft involved in the production of original literary work. Professional Writing courses develop writing skills for use in business, technical, and other professional environments. Composition courses help to develop writing skills from basic to advanced levels.	
Admission Requirements	ADMISSION REQUIREMENTS FOR CREATIVE WRITING COURSES AND PROGRAMS Genre courses in Creative Writing are conducted as workshops in which enrolment is limited to permit constructive analysis of a student's work. Students wishing to enter any introductory genre course in Creative Writing (225, 226, 227) must apply by submitting a letter of intent along with a portfolio consisting ordinarily of 20 pages of their own work in any genre. Applications will be received as early as January of each year but no later than March 15. Since student demand regularly outpaces our enrolment capacity, early application is advisable. Creative Writing programs (Major and Minor) are designed primarily to develop the literary skills of students with a commitment to writing as an art form. Structured workshops guide students from introductory to advanced levels through the practice of their craft under the supervision of experienced writers. Students wishing to proceed to an advanced (400-level) workshop must achieve a final grade of "B-" or better in an introductory workshop in Creative Writing. Students are required to complete the appropriate entrance profile for entry into the program (see §31.002 — Programs and Admission Requirements — Profiles).	
	REQUIREMENTS FOR ENGLISH LITERATURE PROGRAMS All students entering the English Literature Major must take a special Composition placement test which includes a literary component. Depending on the results of the test, students will be granted exemption from the Composition requirement, or placed according to their levels in, initially, one of ENGL 206, ENGL 207, ENGL 212, or ENGL 213. (Some sections of ENGL 212 and ENGL 213 are specially designated for English Majors.) ENGL 212 and ENGL 213 do not count towards an English Literature or Creative Writing program, but may be claimed as general electives. The Composition requirement has to be satisfied in the first year of enrolment in the program. Students should note the required introductory courses in each of the programs.	

Programs

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Admission to the Honours program is granted at the end of the student's first year, after departmental review.

60 BA Honours in English Literature

- 6 Chosen from ENGL 264³, 265³, 266³
 - 6 Chosen from ENGL 270⁶, 272⁶
- NOTE: The above 12 credits to be taken within the first 18 credits

- 18 Chosen from the following four groups; at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.

1) Early, medieval, and 16th century from ENGL 302³, 304⁶, 310³, 316³, 430⁶, 432⁶, 434³

2) 17th century from ENGL 311³, 318N³, 319³, 320⁶, 435³, 436³, 437³

3) 18th century from ENGL 321³, 322³, 323³, 324⁶, 331³, 438³, 439³, 440³, 441³

4) 19th century from ENGL 324⁶, 325⁶, 330⁶, 331³, 441³, 442³, 443³

- 15 Chosen from the following four groups; at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.

1) Modern and contemporary from ENGL 336³, 337⁶, 341³, 345³, 346⁶, 349³, 350⁶, 351³, 354³, 355³, 359³, 394³, 445³, 446³, 447³

2) American from ENGL 363³, 364³, 365³, 367³, 368³, 380³, 448³, 449³, 450³

3) Canadian from ENGL 373³, 374³, 376³, 377³, 378³, 379³, 380³, 451³, 452³, 453³

4) Postcolonial from ENGL 383³, 386³, 387³, 388³, 454³

NOTE: Six of the above 15 credits may be taken from ENGL 279⁶ through 289⁶ in the appropriate groups as follows:

1) ENGL 279⁶, 289⁶

2) ENGL 285⁶

3) ENGL 287⁶

4) ENGL 288⁶

- 3 ENGL 470³

- 12 Elective credits from ENGL 224 through 499

NOTE: Honours students must take at least nine credits at the 400 level, including ENGL 470.

However, a student, in consultation with the Honours-Majors adviser may substitute another 400-level course for ENGL 470.

60 BA Specialization in English Literature

- 6 Chosen from ENGL 264³, 265³, 266³
- 12 Chosen from ENGL 270⁶ through 289⁶ (with at least six credits from ENGL 270⁶, 272⁶)

NOTE: The above 18 credits to be taken within the first 24 credits

- 15 Chosen from the following four groups;

at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.

1) Early, medieval, and 16th century from ENGL 302³, 304⁶, 310³, 316³, 430⁶, 432⁶, 434³

2) 17th century from ENGL 311³, 318N³, 319³, 320⁶, 435³, 436³, 437³

3) 18th century from ENGL 321³, 322³, 323³, 324⁶, 331³, 438³, 439³, 440³, 441³

4) 19th century from ENGL 324⁶, 325⁶, 330⁶, 331³, 441³, 442³, 443³

- 12 Chosen from the following four groups; at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.

1) Modern and contemporary from ENGL 336³, 337⁶, 341³, 345³, 346⁶, 349³, 350⁶, 351³, 354³, 355³, 359³, 394³, 445³, 446³, 447³

2) American from ENGL 363³, 364³, 365³, 367³, 368³, 380³, 448³, 449³, 450³

3) Canadian from ENGL 373³, 374³, 376³, 377³, 378³, 379³, 380³, 451³, 452³, 453³

4) Postcolonial from ENGL 383³, 386³, 387³, 388³, 454³

- 15 Elective credits from ENGL 224 through 499

42 BA Major in English Literature

- 6 Chosen from ENGL 264³, 265³, 266³
- 12 Chosen from ENGL 270⁶ through 289⁶ with at least six credits from ENGL 270⁶, 272⁶

NOTE: Twelve of the above 18 credits to be taken within first 24 credits

- 6 Chosen from ENGL 302³ through 394N³, 398³, 399⁶, 430⁶ through 499⁶

- 6 Chosen from ENGL 270⁶ through 289⁶, 302³ through 499⁶

- 12 Elective credits from ENGL 224³ through 480³, with at least three credits at the 300 or 400 level

60 BA Honours in English and Creative Writing

- 6 Chosen from ENGL 264³, 265³, 266³
- 12 Chosen from ENGL 225⁶, 226⁶, 227⁶
- 6 Chosen from ENGL 425⁶, 426⁶, 427⁶
- 6 Chosen from ENGL 410⁶, 411⁶, 412⁶, 413⁶
- 6 Chosen from ENGL 224³, 410⁶ through 428⁶, 470³

- 12 Chosen from the following five groups. Students must take at least three credits in three of the groups. A course can count in only one group, even if it is listed in more than one.

1) Early, medieval and 16th century from ENGL 302³, 304⁶, 310³, 316³, 430⁶, 432⁶, 434³

2) 17th century from ENGL 311³, 318N³, 319³, 320⁶, 435³, 436³, 437³

3) 18th century from ENGL 321³, 322³, 323³, 324⁶, 438³, 439³, 440³, 441³

4) 19th century from ENGL 324⁶, 325⁶, 330⁶, 331³, 441³, 442³, 443³

5) Modern and contemporary from ENGL 336³, 337⁶, 341³, 345³, 346⁶, 349³, 350⁶, 351³, 354³, 355³, 359³, 394³, 445³, 446³, 447³

6 American and postcolonial from ENGL 285⁶, 288⁶, 363³, 364³, 365³, 367³, 368³, 380³, 383³, 386³, 387³, 388³, 448³, 449³, 450³, 454³

6 Canadian from ENGL 287⁶, 373³, 374³, 376³, 377³, 380³, 451³, 452³, 453³

42 BA Major in Creative Writing*

12 Chosen from ENGL 225⁶, 226⁶, 227⁶

6 Chosen from ENGL 425⁶, 426⁶, 427⁶

6 Chosen from ENGL 410⁶, 411⁶, 412⁶, 413⁶, 425⁶, 426⁶, 427⁶

6 Credits in Canadian Literature

12 ENGL elective credits in literature courses.

**NOTE: Students wishing to register for the Major in Creative Writing should refer to the admission requirements for Creative Writing courses and programs.*

30 Minor in Creative Writing

12 Chosen from ENGL 225⁶, 226⁶, 227⁶

*12 Chosen from ENGL 410⁶, 411⁶, 412⁶, 413⁶, 425⁶, 426⁶, 427⁶

6 ENGL elective credits

Students wishing to register for the Minor in Creative Writing should refer to the admission

requirements for Creative Writing courses and programs.

**NOTE: At least six credits in this group must be chosen from 425⁶, 426⁶, or 427⁶*

24 Minor in English Literature

24 ENGL elective credits in literature courses*

**Students are encouraged to consult with the Department in selecting their courses.*

24 Minor in Professional Writing

12 ENGL 213³, 214³, 215³, 216³

6 ENGL 396⁶

3 Chosen from ENGL 395N³, 397³

3 Chosen from ENGL 233³, 390N³, 395N³, 397³

**Students are encouraged to consult with the Department in selecting their courses.*

60 BA Joint Specialization in English and History

6 Chosen from ENGL 264³, 265³, 266³

6 Periods before 1800 (British and European) from ENGL 302⁶ through 324⁶, 430³ through 441³

6 Canadian, American, and postcolonial from ENGL 363³ through 388³, 448³ through 454³

6 19th century and 20th century (British and European) from ENGL 324³ through 359³, 394³, 442³, 443³, 445³ through 447³

6 Elective credits from ENGL 224³ through 499³

6 HIST 201³, 202³

6 Chosen from HIST 203³, 205³, 251³, 253³

6 200-300 level non-Western HIST

3 300-level pre-1800 Canadian, American, British, or European HIST

3 300-level post-1800 Canadian, American, British, or European HIST

6 300-400 level History elective credits

Courses

200-level courses and 300-level courses without prerequisite are open to all students and may be used as English electives unless otherwise indicated.

Written work may be required in English for these courses; please consult with the Department.

Not all courses listed here are offered in a given year. The Department will make an effort to offer the 200- and 300-level courses that are required for specific programs on a regular basis. General electives (230-254) and courses at the 400 level will be offered on a rotating basis. Students should consult the annual Department of English Course Guide to determine which courses are being offered in any given year.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ENGL 206 Fundamentals of Written English (3 credits)

Prerequisite: Placement test. This course provides practice in grammar and usage, sentence structure, punctuation, paraphrasing and summarizing, paragraphing, and essay writing.

NOTE 1: This course does not count for credit within any English program.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL

course for credit.

NOTE 3: Students who have received credit for ENGL 205 may not take this course for credit.

ENGL 207 Essentials of Written English (3 credits)

Prerequisite: ENGL 206 or placement test. This course provides practice in English composition and reading analysis for students who are not yet ready for ENGL 212.

NOTE 1: This course does not count for credit

within any English program.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL course or ENGL 206 for credit.

NOTE 3: Students who have received credit for ENGL 209 may not take this course for credit.

ENGL 208 Introduction to English Composition and Literary Analysis (6 credits)

Prerequisite: ENGL 207 or placement test. This course is intended for students who wish to improve their ability to engage in written analysis of fiction, poetry, drama, and literary essays.

NOTE 1: This course does not count for credit within any English program.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL course or English course earlier in the composition sequence for credit.

ENGL 212 English Composition — Stage I (3 credits)

Prerequisite: ENGL 207 or placement test. This course is intended to help students produce clear, concise, logically organized essays and reports. Emphasis is placed on purpose, organization, development, sentence structure, and diction.

NOTE 1: A GRADE OF "C-" OR HIGHER IN THIS COURSE MEETS THE UNIVERSITY WRITING TEST REQUIREMENT.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL course or English course earlier in the composition sequence for credit.

ENGL 213 English Composition — Stage II (3 credits)

Prerequisite: ENGL 212. This course develops further the writing skills acquired in ENGL 212. The main purpose is to familiarize students with the process and techniques necessary for the preparation of research papers and academic reports.

NOTE 1: Students who have received credit for this course may not subsequently take any ESL course or English course earlier in the composition sequence.

NOTE 2: The composition sequence also includes ENGL 396, Advanced Composition and Professional Writing.

ENGL 214 Grammar, Usage, and Style (3 credits)

Prerequisite: ENGL 213. This course offers a practical analysis of the conventions governing contemporary English grammar and usage, punctuation, sentence structure, and syntax. It focuses on means for identifying and analysing stylistic effectiveness and persuasive power in diverse professional situations.

NOTE: Students who have received credit for this course may not subsequently take any ESL course or ENGL 206–213 for credit.

ENGL 215 Principles and Practice of Editing (3 credits)

Prerequisite: ENGL 214. This course includes

basic copy editing and techniques for eliminating errors in style, mechanics, and facts, and substantive editing for identifying structural problems and reorganizing, reworking, and rewriting documents.

NOTE: Students who have received credit for this course may not subsequently take any ESL course or ENGL 206–214 for credit.

ENGL 216 Writing for Diverse Audiences (3 credits)

Prerequisite: ENGL 214. This course examines the ways that information is presented to different audiences through writing and the interaction of texts and images. Assignments include analysis of informational and persuasive strategies in model discourses for form, content, style, and design, and the application of such techniques to developing and producing documents.

NOTE: Students who have received credit for this course may not subsequently take any ESL course or ENGL 206–214 for credit.

ENGL 224 The Creative Process (3 credits)

This course introduces students to the creative process involved in writing prose fiction, poetry, and drama, including the search for inspiration, the exploration and nurturing of the "germ" of a pattern or idea, and its development into artistic form. Course material is drawn from texts, letters, worksheets, and biographies of poets, prose writers, and playwrights, and combines lectures and discussions. While the course is not a writing workshop, students are invited to read widely, participate in discussions, and engage in some writing of poetry, fiction, or drama. The course is open to all students.

ENGL 225 Creative Writing: Poetry (6 credits)

This course is a workshop in the writing of poetry, including detailed discussions and written criticism of students' work. It includes the study of selected poems and poetics.

NOTE: Students wishing to register for ENGL 225, 226, or 227, should refer to admission requirements for Creative Writing.

ENGL 226 Creative Writing: Prose Fiction (6 credits)

This course is a workshop in the writing of fiction, including an exploration of narrative forms and techniques as well as discussion and written criticism of students' work. Students are expected to read widely and to submit their own work for discussion and analysis.

NOTE: Students wishing to register for ENGL 225, 226, or 227, should refer to admission requirements for Creative Writing.

ENGL 227 Creative Writing: Drama (6 credits)

This course is a workshop in the writing of plays, including an exploration of dramatic forms and techniques. Students are expected to read widely

and to submit their own work for discussion and analysis.

NOTE: Students wishing to register for ENGL 225, 226, or 227, should refer to admission requirements for Creative Writing.

ENGL 230 Major Writers in English
(6 credits)

This course is an introduction to major writers of British literature in their historical contexts. The survey includes such authors as Chaucer, Shakespeare, Donne, Milton, Swift, Austen, Blake, Wordsworth, Byron, the Brownings, Tennyson, Hardy, Woolf, Joyce, and Eliot.

NOTE: This course may not be taken for credit with ENGL 270 or 272. It is reserved for non-Majors.

NOTE: Students who have received credit for ENGL 256, 257, 258, or 270 may not take this course for credit.

ENGL 231N Medieval Literature in Translation (3 credits)

This course studies influential texts in the Western tradition written between 400 and 1500, with emphasis on the innovations in the various genres of narrative (epic, saga, romance, tale) and erotic and ethical discourse. Texts by such writers as Marie de France, Chrétien de Troyes, Dante, and Petrarch, may be studied, as well as anonymous works such as Icelandic sagas and *The Song of Roland*.

NOTE: Students who have received credit for ENGL 231 or 262 may not take this course for credit.

ENGL 233 Critical Reading (3 credits)

This course is an introduction to the practice of close reading of selections chosen from poetry, fiction, drama, and non-literary prose with the aim of developing the skills necessary to respond to written texts.

NOTE: Students who have received credit for ENGL 271 may not take this course for credit.

ENGL 234 Poetry (3 credits)

Through a detailed examination of the various forms of poetry, this course is designed to familiarize students with the vocabulary and critical and technical concepts of the genre.

NOTE: Students who have received credit for ENGL 275 may not take this course for credit.

ENGL 235N Short Fiction (3 credits)

Through a detailed examination of the various forms of short fiction and the novella, this course is designed to familiarize students with the vocabulary, critical concepts, and history of the genre.

NOTE: Students who have received credit for ENGL 280 may not take this course for credit.

ENGL 240 Drama (6 credits)

This course is an introduction to dramatic literature, principally in the Western tradition, and is designed to familiarize students with major works in this genre. Plays include ancient Greek dramas and works from the European as

well as British and North American stages by such writers as Aeschylus, Sophocles, Aristophanes, Shakespeare, Calderón, Webster, Racine, Molière, Büchner, Chekhov, Ibsen, Beckett, Handke, Stoppard, and Soyinka.

ENGL 241 The Novel (6 credits)

This course is an introduction to major novels of the Western tradition, drawn principally from Britain, Europe, and the Americas. The course includes such authors as Cervantes, Fielding, Lady Murasaki, Austen, Goethe, Stendahl, Flaubert, the Brontës, Eliot, Melville, Dostoevsky, Kafka, Tolstoy, James, Joyce, Mann, Kundera, and Marquez.

ENGL 242 Tragedy and Comedy
(6 credits)

This course is an introduction to the nature and varieties of tragic and comic forms and sensibilities in Western literature. The course includes writers from antiquity to the present, such as in the tragic mode, Sophocles, Euripides, Shakespeare, Behn, Racine, Hardy, Ibsen, Lorca, Chopin, and in the comic mode, Aristophanes, Cervantes, Jonson, Molière, Sterne, Gogol, Wilde, Leacock, and Amis.

ENGL 243 Satire (6 credits)

This course is an introduction to the nature, varieties, and functions of satire, including writers from antiquity to the present, such as Juvenal, Horace, Erasmus, Swift, Voltaire, Byron, Butler, Orwell, Waugh, Spark, Richler, Vonnegut, and Atwood.

NOTE: Students who have received credit for ENGL 283 may not take this course for credit.

ENGL 244 Québec/Montréal Writing in English (3 credits)

This course surveys the literature of Québec written in English, with emphasis on Montréal writing. It includes such writers as F.R. Scott, MacLennan, Klein, Layton, Symons, Gallant, Richler, Cohen, Anderson, Glassco, and Mouré.

ENGL 245 The Bible and Literature
(3 credits)

This course introduces students to the literary handling of Biblical materials and the literary uses of Biblical allusion in writings by such authors as Spenser, Milton, Bunyan, Blake, and T.S. Eliot.

NOTE: Students who have received credit for ENGL 385 may not take this course for credit.

ENGL 246N Science Fiction (3 credits)

This introductory course explores the development of science fiction from Mary Shelley to H.G. Wells to the present day. Along with works by such authors as Huxley, Clarke, Dick, Delany, Le Guin, Atwood, or Gibson, translated works by such authors as Verne, Zamyatin, and Lem may be studied.

NOTE: Students who have received credit for ENGL 246 or 395 may not take this course for credit.

ENGL 247N *Myth and Ideas in Literature*
(3 credits)

This course introduces students to the sources, literary developments, and continuing function of myths that inform and shape our ideas and literature.

NOTE: Students who have received credit for ENGL 247 or 260 may not take this course for credit.

ENGL 249 *Children's Literature* (6 credits)

As an introductory survey of children's literature, this course includes works written primarily for adults but traditionally also read by children, works specifically written for children, as well as fairy tales and other versions of folklore and myth written or adapted for children.

NOTE: Students who have received credit for ENGL 237 may not take this course for credit.

ENGL 250 *Forms of Popular Writing*
(3 credits)

The topic of this course varies from year to year. It investigates such forms as spy novel, detective fiction, mystery, romance, travel writing, horror, erotica in the context of the conventions, history, and popular appeal of the genre under discussion.

ENGL 264 *Introduction to Literary Study: Genre* (3 credits)

This course examines the significance of generic classification for the acts of reading and interpretation. Relying on this principle of selection, the course identifies the formal characteristics of and historical changes in the various genres, such as the story, essay, lyric, and play, each of which utilizes distinctive resources and audience expectations.

NOTE: Students who have received credit for this topic under an ENGL 298 number may not take this course for credit.

ENGL 265 *Introduction to Literary Study: Critical Approaches* (3 credits)

This course examines a variety of critical approaches to interpretation. It explores literary texts in the context of the differing interpretations they provoke and the critical and theoretical assumptions that inform these interpretations.

ENGL 266 *Introduction to Literary Study: Historical and Cultural Approaches* (3 credits)

This course examines selected literary texts through attention to their social, historical, and literary contexts. It looks at such issues as the ways in which literary texts constitute and are constituted by historical period, social class, gender, and ideology, as well as at the concept of "period" as a marker of literary history.

NOTE: Students who have received credit for this topic under an ENGL 298 number may not take this course for credit.

ENGL 270 *British Literature to 1660*
(6 credits)

Starting with selected Old English texts in

translation, the course examines the literary production of the medieval period and the fifteenth to seventeenth centuries in Britain. Works are studied in their social and historical contexts and, where possible, in relation to the other arts. The course may discuss *Beowulf*, Chaucer, Julian of Norwich, medieval drama, Malory, Skelton, Wyatt, Spenser, the Sidneys, Shakespeare, Webster, Donne, Lanyer, Burton, Browne, and Milton.

NOTE: Students who have received credit for ENGL 230, 256, or 257 may not take this course for credit.

ENGL 272 *British Literature from 1660 to 1900* (6 credits)

This course surveys literature written in Britain from the period following the Civil War and Commonwealth to the end of the Victorian era, periods traditionally labelled Neo-Classical, Romantic, and Victorian. The course considers such issues and forms as epic, mock-epic, satire, the development of the novel, the comedy of manners, the rise of the professional writer, the romantic lyric, the increasing activity of women writers, the origins of modernism, and the interrelations among the periods.

NOTE: ENGL 270 is not a prerequisite for this course.

NOTE: Students who have received credit for ENGL 230, 256, or 258 may not take this course for credit.

ENGL 279 *Modern British and American Literature* (6 credits)

This course provides an introduction to the modern period, when writing in the United States and Britain formed an interconnected body of work, making it difficult to determine the national and cultural affiliation of, for example, Eliot and Auden. Readings are drawn from some of the major texts of British and American poetry, drama, and fiction of the first half of the century, including such writers as James, Wharton, Barnes, Woolf, Hemingway, Yeats, Joyce, and Lawrence.

NOTE: Students who have received credit for ENGL 306 may not take this course for credit.

ENGL 285 *Introduction to American Literature* (6 credits)

This course provides an introduction to American literature from the colonial period into the twentieth century. Readings are drawn from such writers as Bradstreet, Emerson, Thoreau, Poe, Hawthorne, Melville, Whitman, Dickinson, Twain, James, Douglass, Chopin, Fitzgerald, and Faulkner.

NOTE: Students who have received credit for ENGL 300, 301, 303 may not take this course for credit.

ENGL 287 *Introduction to Canadian Literature* (6 credits)

This course examines the development of Canadian literature from its beginnings to the present day through a series of representative

works of prose and poetry, written in or translated into English.

NOTE: Students who have received credit for ENGL 290 may not take this course for credit.

ENGL 288 *Introduction to Postcolonial and World Literature* (6 credits)

This course provides an introduction to literature in English from formerly colonized regions such as Africa, South Asia, North America, the South Pacific, and Caribbean. Through an examination of representative texts, the course addresses such issues as the process by which English spread throughout the world as a result of British imperialism, and the development of writing in English both before and during the period of decolonization.

ENGL 289 *Reading Women Writing: an Historical Introduction* (6 credits)

This course offers an historical and theoretical perspective on writings by women from different periods, cultural contexts, and expressive forms. A close reading of selected novels, short stories, plays, and of polemical, poetic, and autobiographical works raises such issues as class, race, and gender; sexuality and creativity; national, collective, and individual identity; literary and political strategies of resistance; the use, transformation and subversion of literary forms; the popular and critical reception of individual works.
NOTE: Students who have received credit for ENGL 248 may not take this course for credit.

ENGL 298 *Selected Topics in English* (3 credits)

ENGL 299 *Selected Topics in English* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ENGL 302 *History of the English Language* (3 credits)

This course examines changes in the English language from the Anglo-Saxon era to the present, considering such matters as pronunciation, inflections, syntax, vocabulary, and social distribution.

NOTE: Students who have received credit for ENGL 393 may not take this course for credit.

ENGL 304 *Chaucer* (6 credits)

This course studies major texts of Geoffrey Chaucer with emphasis on *Troilus and Criseyde* and *Canterbury Tales* in terms of the social, literary, and historical issues opened by these texts.

NOTE: Students who have received credit for ENGL 312 may not take this course for credit.

ENGL 310 *Sixteenth-Century Prose and Poetry* (3 credits)

This course investigates developments in

non-dramatic literature from the late fifteenth century to the 1590s, through an examination of representative poems and prose works in their historical and cultural contexts. The course includes such writers as Skelton, Wyatt, Nashe, Spenser, Sidney, and Shakespeare.

NOTE: Students who have received credit for ENGL 317 may not take this course for credit.

ENGL 311N *Seventeenth-Century Prose and Poetry* (3 credits)

This course examines the development of prose and lyric poetry from the 1590s through the Civil War and Commonwealth periods. It considers such issues as genre, form, the representation of subjectivity and gender, the function of patronage, and the shift to a print culture. The course includes such writers as Mary Sidney, Jonson, Lanyer, Donne, Browne, Walton, Herbert, Wroth, and Marvell.

NOTE: Students who have received credit for ENGL 327 may not take this course for credit.

ENGL 316 *Spenser* (3 credits)

This course examines Spenser's works, especially *The Faerie Queene*, in relation to such topics as genre, literary tradition, and historical and cultural contexts.

ENGL 318N *English Renaissance Drama* (3 credits)

This course studies plays written in the period from the start of the English commercial theatre in 1576 until its closing in 1642, in terms of the development of dramatic forms, court and popular culture, and social history. The course includes such writers as Kyd, Marlowe, Middleton, Jonson, Cary, Webster, and Ford.

NOTE: Students who have received credit for ENGL 318 may not take this course for credit.

ENGL 319 *Milton* (3 credits)

This course examines *Paradise Lost* and selections from Milton's early poetry, especially *Lycidas*, in the contexts of seventeenth-century writing, politics, and religion.

NOTE: Students who have received credit for ENGL 328 may not take this course for credit.

ENGL 320 *Shakespeare* (6 credits)

This course examines a range of Shakespearean texts in relation to such matters as dramatic and theatrical conventions, social history, poetic language, high and popular culture, critical history, and influence.

ENGL 321 *Restoration and Early Eighteenth-Century Prose and Poetry* (3 credits)

This course studies the non-dramatic writing of the period from the Restoration through the first four decades of the eighteenth century, with attention to such topics as the expansion of the reading public, the shift from a court-centred scene of literary production, the founding of the Royal Society, and formal topics, such as developments in satire, essay, and novel. Authors may

include Cavendish, Dryden, Manley, Addison, Steele, Swift, Pope, Defoe, and Fielding.
NOTE: Students who have received credit for ENGL 333 may not take this course for credit.

ENGL 322 *Restoration and Eighteenth-Century Drama* (3 credits)

This course examines the changing role of the theatre in English culture from the Restoration to the end of the eighteenth century. It includes examples of comedies of Manners, Heroic Tragedies, She-tragedies, Sentimental Tragedies and Sentimental comedies by such writers as Etherege, Congreve, Behn, Trotter, Cibber, Sheridan, and Goldsmith.

NOTE: Students who have received credit for ENGL 335 may not take this course for credit.

ENGL 323 *Literature of the Mid-Eighteenth Century* (3 credits)

This course examines the writing of the period from the 1740s to the 1780s by such authors as Sterne, Gay, Richardson, Lady Mary Wortley Montagu, Johnson, More, Gray, Collins, Gibbon, and Burke. It explores such concepts and modes as the sentimental, the epistolary, the sublime, and the writing of history and biography.

NOTE: Students who have received credit for ENGL 334 may not take this course for credit.

ENGL 324 *The Eighteenth- and Nineteenth-Century Novel* (6 credits)

This course surveys developments in the British novel from its origins in documentary realism, satire, and romance, including the gothic, to the emergence of the novel as a dominant literary genre. The course includes works by such writers as Defoe, Fielding, Sterne, Radcliffe, Burney, Edgeworth, Austen, Dickens, the Brontës, Eliot, and Hardy.

ENGL 325 *Literature of the Romantic Period* (6 credits)

This course examines the prose and poetry of the Romantic period (ca. 1790 to 1830s) in relation to such topics as the French Revolution, the Napoleonic wars, domestic politics; literary conventions; the idea of the poet. Among the poets to be considered are Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats. Some attention may be given to such writers as Dorothy Wordsworth, De Quincey, Hazlitt, the Lambs, Austen, Scott, Mary Shelley, and Peacock.

NOTE: Students who have received credit for ENGL 338 may not take this course for credit.

ENGL 330 *Literature of the Victorian Period* (6 credits)

This course studies the poetry, fiction and other prose writings of such writers as Carlyle, Tennyson, the Brownings, the Brontës, Dickens, George Eliot, Newman, Rushkin, and Arnold. These works are examined in relation to such issues as class divisions, gender roles, the erosion of the authority of institutional religion,

the increasing prestige of scientific explanation, the growth of British imperial power.

NOTE: Students who have received credit for ENGL 342 may not take this course for credit.

ENGL 331 *Eighteenth- and Nineteenth-Century Writing by Women* (3 credits)

This course examines the poetry, prose, and drama of such writers as Astell, Manley, Finch, Haywood, Burney, Radcliffe, Edgeworth, Austen, Wollstonecraft, Shelley, the Brontës, and Eliot in such contexts as the gendering of authorship, the making of literary history, and the uses and transformations of literary conventions.

NOTE: Students who have received credit for ENGL 381 may not take this course for credit.

ENGL 336 *Late Victorian and Edwardian Writing* (3 credits)

This course investigates such matters as late Victorian art and aesthetic theory, the rise of modernism, literary experimentation, and the interrogation of traditional values. Works are selected from such writers as Butler, Pater, Wilde, James, the Rossettis, Swinburne, Morris, Meredith, Schreiner, Hardy, Conrad, and Forster.

NOTE: Students who have received credit for ENGL 352, 353 may not take this course for credit.

ENGL 337 *Twentieth-Century British Literature* (6 credits)

This course examines modern and contemporary prose, poetry, and drama, and the formal, cultural, social, and political changes and upheavals of a century characterized as "the age of extremes". Works are selected from such writers as Joyce, Yeats, Mansfield, Woolf, Lawrence, Eliot, Auden, Bowen, Lessing, Hill, Hughes, Stoppard, Carter, Byatt, and Rushdie.

NOTE: Students who have received credit for ENGL 356 may not take this course for credit.

ENGL 341 *Modern Fiction* (3 credits)

This course examines a developing international literary culture from the early twentieth century to the post-war period. Works are selected from such writers as Mann, Kafka, Proust, Stein, Camus, Borges, Nabokov, and Pynchon.

NOTE: Students who have received credit for ENGL 307, 308 may not take this course for credit.

ENGL 345 *Modern Drama* (3 credits)

This course surveys the main currents of twentieth-century drama in a study of such writers as Ibsen, Chekhov, Strindberg, Lorca, Lady Gregory, Ionesco, Barnes, Beckett, Albee, Pinter, Orton, Stoppard, and Handke.

NOTE: Students who have received credit for ENGL 392 may not take this course for credit.

ENGL 346 *Modern European Literature* (6 credits)

This course surveys late nineteenth- and twentieth-century plays, poems, and novels in

translation, chosen from such writers as Dostoevsky, Tolstoy, Ibsen, Chekhov, Gide, Sartre, Colette, Akhmatova, Svevo, Mann, Musil, Böll, and Calvino.

NOTE: Students who have received credit for ENGL 305 may not take this course for credit.

ENGL 349 *Modern Poetry in English*
(3 credits)

This course studies the theory and practice of poets writing in English during the twentieth century. Examples are chosen from such writers as Yeats, Pound, Eliot, Crane, Stein, Auden, Stevens, Moore, Bishop, and Merrill, as well as from some more recent poets.

NOTE: Students who have received credit for ENGL 390 may not take this course for credit.

ENGL 350 *Contemporary Literature*
(6 credits)

This course examines the relation between the concepts of the contemporary and the postmodern, through an examination of such writers as Amis, Calvino, Pynchon, Rushdie, Desai, Auster, Kureishi, Winterson, Carter, DeLillo, Dove, Heaney, Wilson, Kushner, Durang, and Walcott.

NOTE: Students who have received credit for ENGL 459 may not take this course for credit.

ENGL 351 *Twentieth-Century Writing by Women* (3 credits)

Through fiction, personal writings, poetry, and drama, this course examines gender and its discontents in turn-of-the-century and mid-century writing, in writing of the modernist period, and in writing of the politically oriented "second wave" of feminism of the 1960s and 1970s. Its concerns include the developing representation of race, class, and sexual orientation. Works are selected from such writers as Woolf, Hurston, Nin, Plath, Rich, Rule, Walker, Morrison, Cixous, Pollock, Gordimer, and El Saadawi.

NOTE: Students who have received credit for ENGL 382 may not take this course for credit.

ENGL 354 *Contemporary Writing by Women* (3 credits)

This course deals with fiction, personal writings, poetry, and drama from the late 1970s to the present. Its concerns may include the challenges and possibilities of postmodernism; experiments in writing the life, writing the body, writing between genres, between cultures; collaborative writing; the uses and transformations of traditional and popular forms of writing. Works are selected from such writers as Morrison, Desai, Munro, Marlatt, Scott, Maracle, Aidoo, Winterson, Gallant, Anzaldúa, and Rendell.

NOTE: Students who have received credit for ENGL 382 may not take this course for credit.

ENGL 355 *Joyce* (3 credits)

This course will examine Joyce's *Ulysses* in its formal, historical, and cultural contexts. Other writings of Joyce may receive some attention.

ENGL 359 *Studies in Irish Literature*
(3 credits)

The subject matter of this course varies. Topics may include the Irish Literary Revival, contemporary Irish literature, the Irish short story tradition.

ENGL 362 *Studies in Science Fiction*
(3 credits)

The subject matter of this course varies. It may concentrate on a particular theme or issue, or on an important author or group of authors.

ENGL 363 *American Literature from Origins to Late Nineteenth Century* (3 credits)

This course covers the various forms of American writing — fiction, biography, autobiography, letters, poems — from colonial times to the late 19th century through the work of such writers as Bradstreet, Taylor, Edwards, Wheatley, Emerson, Thoreau, Melville, Hawthorne, Poe, Twain, Whitman, Dickinson, Douglass, and Stowe.

NOTE: Students who have received credit for ENGL 301 may not take this course for credit.

ENGL 364 *American Literature from the Late Nineteenth to the Mid-Twentieth Century*
(3 credits)

This course studies the overlapping and related developments of naturalism, regionalism, realism, and modernism through the work of such writers as Twain, Stephen Crane, Dreiser, Chopin, Wharton, James, Fitzgerald, Hart Crane, O'Neill, Faulkner, Hemingway, Pound, Moore, Ellison, and Williams.

NOTE: Students who have received credit for ENGL 303 may not take this course for credit.

ENGL 365 *American Literature from Mid-Century to the Present*
(3 credits)

This course considers developments in American literature since World War II through the work of such writers as Plath, Bishop, Baldwin, O'Connor, Bellow, Nabokov, Pynchon, Updike, Oates, Morrison, Barthelme, and Walker.

NOTE: Students who have received credit for ENGL 309 may not take this course for credit.

ENGL 367 *American Poetry* (3 credits)

This course considers the theory and practice of American poetry from the nineteenth century to the present through the work of such writers as Whitman, Dickinson, Robinson, Frost, H.D., Pound, Cummings, Stevens, Williams, Olson, Ginsberg, Snyder, Moore, Rukeyser, Bishop, Merrill, Rich, Ashberry, and Angelou.

ENGL 368 *African-American Literature*
(3 credits)

This course provides a survey of the African-American literary tradition from Frederick Douglass to the present, giving particular attention to slave narratives, the Harlem Renaissance, the Civil Rights Movement, and contemporary writing. The course includes the

prose of such writers as Toomer, Larsen, Wright, Hurston, Ellison, Baldwin, Walker, and Reed, and poetry by such writers as Hughes, Brooks, Baraka, and Morrison.

ENGL 373 *Nineteenth-Century Canadian Literature* (3 credits)

This course studies the literature written in Canada in a variety of genres as the country evolved from colony to nation. It explores such topics as the relations among discourse, nation building, gender, and genre.

ENGL 374 *Canadian Fiction to 1950* (3 credits)

This course studies the themes and technical strategies of Canadian fiction from the 1890s to the mid-twentieth century by such authors as Roberts, Montgomery, Leacock, Callaghan, Ross, MacLennan, Mitchell, and Smart.

NOTE: Students who have received credit for ENGL 370 may not take this course for credit.

ENGL 376 *Postwar Canadian Fiction* (3 credits)

This course studies Canadian fiction from 1950 through the mid-1960s as it incorporates the lyrical and the documentary, the universal and the regional, the traditional and the experimental. Authors may include Roy, Wilson, Buckler, MacLennan, Watson, Wiseman, Cohen, and Richler.

NOTE: Students who have received credit for ENGL 371 may not take this course for credit.

ENGL 377 *Contemporary Canadian Fiction* (3 credits)

This course studies the continuity and development of Canadian fiction from the mid-1960s to the present. Authors may include Laurence, Davies, Carrier, Wiebe, Atwood, Munro, Kogawa, Shields, Gallant, and Ondaatje.

NOTE: Students who have received credit for ENGL 372 may not take this course for credit.

ENGL 378 *Modern Canadian Poetry* (3 credits)

This course examines the changes in Canadian poetry from the beginning of the twentieth century to the mid-1960s by such authors as Pratt, Klein, Scott, Livesay, Birney, Page, Layton, Purdy, and Avison.

NOTE: Students who have received credit for ENGL 375 may not take this course for credit.

ENGL 379N *Contemporary Canadian Poetry* (3 credits)

This course examines the development of Canadian poetry from the mid-1960s to the present by such authors as Atwood, Ondaatje, Nichol, MacEwan, Kroetsch, Webb, Kogawa, Dewdney, and Brand.

ENGL 380 *First Nations/North American Native Literature* (3 credits)

This course studies the native literature of Canada and/or the United States, from oral performance traditions, transcriptions and

translations into English, and writing in English by such authors as Johnston, Campbell, King, Highway, Momaday, Erdrich, Allen, and Silko.

ENGL 383 *African Literature* (3 credits)

This course considers how literature in English by writers from sub-Saharan Africa is embedded in the history and experience of colonization and decolonization. The course includes such authors as Achebe, Soyinka, Saro-Wiwa, Emecheta, Okri, Armah, Aidoo, Farah, Dangarembga, Coetzee, and Gordimer. The focus is on the political and aesthetic issues raised by African writing in English.

ENGL 386 *Caribbean Literature* (3 credits)

This course explores how Caribbean literature in English from nations such as Barbados, Trinidad, Antigua, Jamaica, Grenada, St. Lucia, and Guyana is implicated in the history of slavery, colonialism, and postcolonialism. The work of such authors as Bennett, Walcott, Brathwaite, Goodison, James, Selvon, Lamming, Naipaul, Brodber, Cliff, and Kincaid is examined in relation to the writers' socio-cultural contexts and to the political and aesthetic issues raised by their texts.

ENGL 387 *South Asian Literature* (3 credits)

This course studies literature from South Asia written in English by authors from India, Pakistan, Bangladesh, and Sri Lanka, such as Rushdie, Anand, Das, Narayan, Ghosh, Desai, Chaudhuri, Markandaya, Sahgal, Salvaduri, Sidhwa, Rao, and Mistry. The focus is on the significance of precolonial, colonial, and postcolonial socio-cultural concerns as expressed in a variety of literary genres. Attention is given to English as a tool of colonization as well as a means for critiquing cultural hegemony.

ENGL 388N *Literature from Australia and New Zealand* (3 credits)

This course examines literature in English from Australia and New Zealand by such writers as White, Malouf, Jolley, Carey, Stead, Mudrooroo, Stow, Johnson, Frame, Hulma, Wedde, and Kenneally. Central to the course is a discussion of the impact of colonialism, and the ongoing relationship between settler and aboriginal communities as it inflects a variety of literary genres. Literature from the Pacific islands may also be considered.

ENGL 390N *Studies in Rhetoric* (3 credits)

This course offers an inquiry into the nature and function of rhetoric, the art of convincing others, through an examination of such influential classical writers as Aristotle, Cicero, and Quintilian, as well as the place of rhetoric in contemporary critical discourse. This course offers, through written exercises, practical experience in the development of rhetorical techniques.

NOTE: Students who have received credit for ENGL 384 or 444 may not take this course for credit.

ENGL 391 *History of Criticism and Literary Theory* (6 credits)

This course surveys major theories of criticism in their historical contexts from the Classical period to the mid-twentieth century. Texts are chosen from such representative writers as Aristotle, Sidney, Dryden, Johnson, Lessing, Coleridge, Arnold, Richards, Eliot, Leavis, Empson, Bakhtin, Burke, and Frye.

ENGL 394N *Contemporary Critical Theory* (3 credits)

This course introduces students to various interpretive strategies in contemporary critical theory, through a study of such topics as structuralism, narratology, debates about genealogy, deconstruction, psychoanalytic theory, gender and performativity. Readings may include texts by Nietzsche, Saussure, Barthes, Foucault, Derrida, Eco, Austin, Cixous, and Sedgwick.

NOTE: Students who have received credit for ENGL 389 may not take this course for credit.

ENGL 395N *Technical Writing* (3 credits)

Prerequisite: ENGL 214, 215, 216. This course examines written and visual strategies for communicating information in technical fields. Practice includes experience in audience analysis and visual design in the preparation of such documents as technical abstracts, reports, proposals, descriptions, and instructional manuals.

NOTE: Students who have received credit for this course may not subsequently take any ESL course or ENGL 206–216 for credit.

ENGL 396 *Advanced Composition and Professional Writing* (6 credits)

Prerequisite: ENGL 213 or placement test. This course is intended for students already in control of the essentials of composition who wish to develop their ability to write effectively for business and professional purposes.

NOTE: Students who have received credit for this course may not subsequently take any ESL course or ENGL 206–213 for credit.

ENGL 397 *Business Writing* (3 credits)

Prerequisite: ENGL 214, 215, 216. This course examines written and visual strategies for communicating information in business contexts. Practice includes experience in audience analysis and visual design in the creation of such business documents as letters, memos, minutes, brochures, press releases, and company newsletters.

NOTE: Students who have received credit for this course may not subsequently take any ESL course or ENGL 206–216 for credit.

ENGL 398 *Selected Topics in English* (3 credits)

ENGL 399 *Selected Topics in English* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ENGL 410 *Non-Fiction Writing* (6 credits)

Prerequisite: ENGL 225 or 226 or 227, or permission of the Department. This course is a workshop in the writing of creative non-fiction (journal, personal essay, travel, biography and autobiography) including the reading of selected texts and discussion and criticism of students' work.

ENGL 411 *Script Writing for Radio, Screen, and Television* (6 credits)

Prerequisite: ENGL 225 or 226 or 227, or permission of the Department. This course is a workshop in the composition and development of creative scripts for radio, screen, and television. In any one year, the course may concentrate on one or two of these areas.

ENGL 412 *Writing of Children's Literature* (6 credits)

Prerequisite: ENGL 225 or 226 or 227, or permission of the Department. This course is a workshop in the writing of prose, poetry, and drama for children, including an exploration of the literary techniques appropriate to the sensibilities of children.

ENGL 413 *Publishing and Editing* (6 credits)

Prerequisite: ENGL 225 or 226 or 227, or permission of the Department. This course explores such topics as the process of founding and operating small presses or magazines, producing anthologies, and editing individual manuscripts and books.

ENGL 425 *Advanced Creative Writing: Poetry* (6 credits)

Prerequisite: ENGL 225 or permission of the Department. Through intensive analysis and discussion of students' work, experimentation with a variety of forms, and selected reading, this workshop helps students extend their grasp of poetics and their competence in the writing of poetry.

ENGL 426 *Advanced Creative Writing: Prose Fiction* (6 credits)

Prerequisite: ENGL 226 or permission of the Department. Through intensive analysis and discussion of submitted work and directed reading in modern fiction, this workshop extends the development of students' narrative skills and their understanding of fictional forms.

ENGL 427 *Advanced Creative Writing: Drama* (6 credits)

Prerequisite: ENGL 227 or permission of the Department. Through reading of contemporary playwrights and intensive discussion and analysis of submitted work, this workshop helps students refine their skills in the process of completing a full-length play.

ENGL 428 *Advanced Studies in Creative Writing* (6 credits)

Prerequisite: ENGL 225 or 226 or 227, and one

400-level creative writing workshop, or permission of the Department.

ENGL 429 *Advanced Studies in Creative Writing* (3 credits)

Prerequisite: ENGL 225 or 226 or 227, and one 400-level creative writing workshop, or permission of the Department.

These courses are advanced workshops whose subject and format are announced in the English Department Course Guide. These courses are intended for those who have already completed several workshops. Submission of a brief portfolio may be required for admission.

ENGL 430 *Old English* (6 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the language, literature, and culture of the Anglo-Saxon era, including such texts as elegaic lyrics and sections of *Beowulf*.

ENGL 432 *Middle English* (6 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the variety of texts in English dialects from 1200 to 1500, including such works as *Sir Gawain and the Green Knight* and other romances, *Piers Plowman*, *Pearl*, the *Showings* of Julian of Norwich, other religious and social discourse, lyrics, and drama.

ENGL 434 *Advanced Studies in Early English Literature* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 435 *Women Writers of the Early Modern Period* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course examines the emergence into print of women writers from the late sixteenth to the late seventeenth centuries, by exploring such issues as the construction of literary history, histories of gender and sexuality, the relations between gender and genre. Works are chosen from such writers as Sidney, Sowernam, Wroth, Cary, Lanyer, Philips, Cavendish, Behn, Killigrew, Manley, and Trotter.

ENGL 436 *Literature of the Civil War and Commonwealth Period* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the prose and poetry of the 1630s through the 1650s. It explores the ways in which the Civil War was represented by such writers as Herrick, Suckling, Cowley, Bradstreet, Milton and Marvell. Political tracts, journalism, and private papers and diaries may also form part of the material of the course.

ENGL 437 *Advanced Studies in Renaissance and Early Modern Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 438 *History, Politics, and Literature in the Eighteenth Century* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course examines the relations among the categories of history, politics, and literature, and their development as distinct discourses over the course of the century, through a study of such topics as the status of religion, the rise of science, the expansion of empire, the development of aesthetic discourse, and the construction of the category of the neoclassical.

ENGL 439 *The Rise of Criticism and Literary History* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course traces the joint development of the discourses of literary criticism and literary history from 1660 to the legislation assigning copyright to authors in the late eighteenth century. Examples are drawn from such writers as Dryden, Dennis, Addison, Shaftesbury, Hume, and Johnson.

ENGL 440 *Advanced Studies in Late Seventeenth- and Eighteenth-Century Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 441 *Forms of Eighteenth- and Nineteenth-Century Fiction* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course may focus on a single writer, a type of fiction such as the gothic or the epistolary, or a particular issue in the development of the novel, such as realism or the emergence of women's fiction.

ENGL 442 *Comparative Nineteenth-Century Literature* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies literary developments in the United Kingdom, the United States, and Canada, including such issues as Romanticism, the development of national literatures, conceptions of place and landscape, and responses to cultural change.

ENGL 443 *Advanced Studies in Nineteenth-Century Literature* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 445 *Gender and Sexuality: Contemporary Literature and Theory* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course examines the development of the terms “gender” and “sexuality” as categories of historical analysis and literary interpretation, by reading feminist and queer theories of gender and sexuality, such as those of Rubin, Butler, Sedgwick, and Bredbeck, alongside such literary texts as those by Stein, Cooper, Tremblay, and Winterson.

ENGL 446 *Advanced Studies in Twentieth-Century Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 447 *Advanced Studies in Literary Theory* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 448 *The American Renaissance* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course examines both the twentieth-century critics who established and developed the concept of the American Renaissance, and the group of antebellum authors who were chosen as its exemplars, including Emerson, Melville, and Whitman. It also interrogates contemporary critical revisions of that canon, broaching the larger issue of canon formation.

ENGL 449 *The American Postmodern* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course focuses on postmodern American writers in the context of the critical debates about what constitutes the postmodern: formally, generically, and politically. It considers such writers as Antin, Ashbery, Waldman, Pynchon, Barthelme, Barth, Acker, Ford, and Morrison.

ENGL 450 *Advanced Studies in American Literature* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. A seminar on a selected topic, text, or author. Specific content varies from year to year.

ENGL 451 *History and Ideology in Canadian Literature* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the treatment in Canadian literature of such historical and political events, issues, and ideologies as the Conquest, the railroad, the

threat of American domination, immigration, and the Canadian west.

ENGL 452 *Recent Experiments in Canadian Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies contemporary writing that breaks with or interrogates traditional literary genres and forms. Examples are drawn from such authors as Kroetsch, Marlatt, Ondaatje, Highway, Dewdney, Mouré, and Nichol.

NOTE: Students who have received credit for ENGL 293 may not take this course for credit.

ENGL 453 *Advanced Studies in Canadian Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 454 *Advanced Studies in Postcolonial Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 470 *Honours Seminar* (3 credits)

Prerequisite: Enrolment in Honours English and 30 credits in English. The topic of this course varies from year to year. The course provides the opportunity for final-year Honours students to apply their experience of literature, literary theory, and criticism on a more advanced level. *NOTE: In consultation with the Honours/Majors adviser, Honours students may substitute another course at the 400 level for ENGL 470.*

ENGL 474 *Honours Essay* (3 credits)

Prerequisite: Enrolment in Honours English and 30 credits in English. With the permission of the Department, an Honours student may arrange a tutorial program with a faculty member, culminating in the writing of a long paper.

ENGL 480 *Independent Studies* (3 credits)

Prerequisite: Enrolment in an English program and nine credits at the 300 level. With the permission of the Department, a student may arrange a tutorial program with a faculty member.

ENGL 490 *Joint Tutorial in History and English* (6 credits)

Prerequisite: Enrolment in an English program or nine credits in English Literature. A tutorial for students in an English and History Joint Specialization program.

ENGL 498 *Advanced Topics in English* (3 credits)

ENGL 499 *Advanced Topics in English* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.110

ÉTUDES FRANÇAISES

Faculty	Directrice LUCIE LEQUIN, Professeure agrégée	PIERRE PARC MARIE-FRANCE WAGNER
	Professeure titulaire et professeurs titulaires JEAN-MARC GOUANVIC GASTON LAURION SHERRY SIMON MAÏR VERTHUY	Professeure adjointe et professeurs adjoints AIMÉ AVOLONTO PHILIPPE CAIGNON OLLIVIER DYENS BENOIT LÉGER FRANÇOISE NAUDILLON
	Professeures et professeurs agrégés PAUL BANDIA LOUISE BRUNETTE GILLES CHARPENTIER CLAIRE LE BRUN-GOUANVIC CATHERINE MAVRIKAKIS	Professeures et professeurs associés MARTHE J. CATRY-VERRON PIERRE L'HÉRAULT MARIE-FRANÇOISE LIGIER
Localisation	Campus Sir George Williams J.W. McConnell, Salle : LB 631-10 (514) 848-7500/7509	
Objectifs du département	<p>L'appellation Études françaises reflète le concept pluridisciplinaire sur lequel se fondent les deux volets de notre mission universitaire : l'enseignement et la recherche. La recherche pure et appliquée se pratique dans les domaines les plus variés de la discipline en étroite liaison avec l'enseignement. De plus, nous participons à la vie intellectuelle et professionnelle de la collectivité, à l'échelle nationale et internationale.</p> <p>Le Département d'études françaises a une double vocation. Il offre d'une part de solides programmes de langue, littérature, traduction et didactique aux étudiantes et étudiants qui viennent y chercher une formation spécialisée. Il joue d'autre part un rôle capital au sein de l'Université en offrant un vaste éventail de cours de langue, linguistique, littérature et civilisation aux étudiantes et étudiants qui souhaitent compléter la formation qu'elles ou ils reçoivent dans d'autres départements.</p>	
Programmes	<p>Il appartient à chaque étudiante et étudiant de remplir toutes les conditions requises dans son programme. L'exposant 3 ou 6 indique le nombre de crédits.</p> <p>N.B. : Chaque candidate et candidat aux programmes de traduction devrait inclure à son dossier une lettre d'intention rédigée dans sa langue principale.</p> <p>N.B. : Avant de s'inscrire, les étudiantes et étudiants devront faire approuver leur programme par un membre désigné du département.</p>	
	<p>60 BA Spécialisation en études françaises</p> <p>N.B. : Les principaux critères de classement sont la langue d'enseignement des études secondaires, les notes obtenues et les résultats du test d'auto-évaluation du département. Pour obtenir leur diplôme, les étudiantes et étudiants doivent suivre tous les cours du programme dans la voie (A ou B) où ils sont inscrits.</p> <p>A. Pour les étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français :</p> <p>18 crédits choisis parmi les suivants : FRAN 301⁶, 302³, 303³, 306³, 334³, 400³, 401³, 406³, 407³</p> <p>15 crédits FLIT 300³, 302³, 303³, 305³, 308³</p> <p>27 crédits choisis parmi les autres cours de littérature du département de niveau 300 et 400</p>	<p>B. Pour les étudiants et étudiantes ayant effectué leurs études secondaires en français :</p> <p>12 crédits choisis parmi les suivants : FRAN 330³, 331³, 333³, 400³, 401³, 402⁶, 403³, 406³, 407³, 466³, 468³, 469³, 470³, 471³</p> <p>15 crédits FLIT 300³, 302³, 303³, 305³, 308³</p> <p>33 crédits choisis parmi les autres cours de littérature du département de niveau 300 et 400.</p> <p>45 BA Majeure en études françaises Option : Langue ou littératures de langue française</p> <p>N.B. : Les principaux critères de classement sont la langue d'enseignement des études secondaires, les notes obtenues et les résultats du test d'auto-évaluation du département. Pour obtenir leur diplôme, les étudiantes et étudiants</p>

doivent suivre tous les cours du programme dans la voie (A ou B) où ils sont inscrits.

A. Pour les étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français :

Tronc commun

- 18 crédits à choisir parmi les cours FRAN 213⁶ (ou 214³ et 215³), 219³, 301⁶, 302³, 303³, 305³, 306³, 334³, 400³, 401³, 406³, 407³

- 6 crédits à choisir parmi les cours FLIT 220³, 230³, 240³, 250³, 298³

Volet langue

- 21 crédits choisis parmi les cours FRAN 318³, 319³, 330³, 331³, 333³, 334³, 400³, 401³, 402⁶, 403³, 406³, 407³, 408³, 409³, 412³, 414³, 415³, 418³, 419³, 466³, 468³, 469³, 470³, 471³

OU

Volet littérature

- 21 crédits FLIT choisis parmi les autres cours de littérature du département

B. Pour les étudiantes et étudiants ayant effectué leurs études secondaires en français :

Tronc commun

- 15 crédits à choisir parmi les cours FRAN 306³, 334³, 400³, 401³, 402⁶, 406³, 407³

- 9 crédits à choisir parmi les cours FLIT 300³, 302³, 308³ ou 303³, 305³, 308³

Volet langue

- 21 crédits choisis parmi les cours FRAN 330³, 331³, 333³, 334³, 400³, 401³, 402⁶, 403³, 406³, 407³, 408³, 409³, 412³, 414³, 415³, 418³, 419³, 466³, 468³, 469³, 470³, 471³ ou parmi 6 crédits FLIT

OU

Volet littérature

- 21 crédits FLIT choisis parmi les autres cours de littérature du département de niveau 300 et 400

48 BA Majeure en études françaises

Option : Traduction

1^{re} étape

- 6 crédits ENGL 212³ et 213³

- 6 crédits à choisir parmi les cours FRAN 301⁶, 302³, 303³, 306³, 400³, 401³

2^e étape

- 6 crédits à choisir parmi les cours FLIT 300³ et 302³, ou 303³ et 305³

- 6 crédits à choisir parmi les cours FRAN 400³, 401³, 402⁶, 403³, 406³, 407³

- 9 crédits FTRA 200³, et FTRA 201³ et 207³ ou FTRA 202³ et 208³

3^e étape

- 6 crédits à choisir parmi les cours FTRA 301³ ou 304³, 305³ ou 306³, 310³, 403³ ou 404³, 405³ ou 406³, 408³

- 3 crédits à choisir parmi les cours FTRA 412³ et 414³

- 6 crédits en littérature d'expression anglaise

45 BA Majeure en études françaises

Option : Langue et didactique

N.B. : Cette majeure est destinée à celles et

ceux qui possèdent déjà une bonne maîtrise du français et qui souhaitent renforcer leurs connaissances pour pouvoir accéder à des programmes de premier ou de deuxième cycles exigeant une très bonne compétence linguistique, au plan théorique comme au plan pratique, notamment les programmes spécialisés d'enseignement du français. La majeure débute au niveau 400. Les étudiantes et étudiants qui n'ont pas atteint le niveau nécessaire pourront s'y préparer en suivant, hors majeure, un maximum de quatre cours au niveau 300, choisis parmi FRAN 301, 302, 303, 306, 334.

1^{re} et 2^e étapes (30 cr.)

- 12 crédits à choisir parmi les cours FRAN 400³, 401³, 402⁶, 403³, 406³, 407³, 408³

- 12 crédits FLIT au choix en littératures de langue française

- 6 crédits à choisir parmi les cours FRAN 330³, 331³, 333³, 334³

2^e et 3^e étapes (15 cr.)

- 6 crédits à choisir parmi les cours FRAN 466³, 468³, 469³, 470³, 471³

- 9 crédits à choisir parmi les cours FRAN 481³, 482³, 485³, 486³

24 Mineure en langue française

- 24 crédits de langue, choisis dans un ordre accepté par le département, parmi les cours suivants :

• Un maximum de 18 crédits à choisir parmi les cours FRAN 213⁶, 214³, 215³, 219³, 301⁶, 302³, 303³, 305³, 306³, 318³, 319³, 334³; FLIT 230³, 240³

• Un minimum de six crédits à choisir parmi les cours FRAN 330³, 331³, 400³, 401³, 406³, 407³, 408³, 409³, 412³, 414³, 415³, 418³, 419³, 466³, 470³, 471³

24 Mineure en littératures de langue française

- 24 crédits en littératures de langue française choisis en consultation avec le département

30 Certificat en langue française

Ce programme est accessible soit aux vrais débutants soit à des personnes qui ont déjà une certaine connaissance du français. Dans les deux cas, il permettra d'accéder à un niveau relativement avancé de communication et d'expression en français.

- 30 crédits FRAN, choisis à un niveau et dans un ordre acceptés par le département,

• 18 crédits FRAN 211⁶, 212⁶, 213⁶ (ou 214³ et 215³), 219³, 301⁶ (ou 302³ et 303³), 305³, 306³, 334³

• 12 crédits FRAN 301⁶ (ou 302³ et 303³), 306³, 334³, 400³, 401³, 406³, 407³

N.B. : Ce certificat exige normalement plus d'une année de scolarité.

66 BA Spécialisation en traduction

- N.B. : 1. Le BA Spécialisation en traduction (formule standard et formule coopérative) est un programme contingenté. Comme il demande une excellente connaissance du français et de l'anglais, les étudiantes et étudiants admis devront subir des tests de placement dans les deux langues. Les cours FTRA sont réservés en priorité aux étudiantes et étudiants inscrits dans les programmes de traduction.
2. Le programme de BA Spécialisation en traduction se présente sous deux formules : la formule standard et la formule coopérative. Les conditions d'admission au BA spécialisé en traduction de formule coopérative comprennent, outre celles du programme spécialisé standard, d'autres filtres du type lettre d'intention, examen écrit, entrevue. La formule coopérative comprend les mêmes cours, en nombre et en nature, que la formule standard; cependant, la séquence des cours varie et trois stages rémunérés de quatre mois chacun, viennent s'ajouter et alternent avec les sessions d'étude (voir calendrier ci-après). Ces stages se déroulent au sein de services linguistiques et sont consacrés à des tâches en traduction ou dans l'un des domaines connexes : rédaction, terminologie, documentation, etc.

Année	Automne	Hiver	Été
1	Cours I	Cours II	Cours III
2	Stage I	Cours IV	Stage II
3	Cours V	Stage III	Cours VI

Les étudiantes et étudiants du programme coopératif sont encadrés chacune et chacun personnellement et doivent satisfaire aux exigences de la Faculté des arts et des sciences et de l'Institut d'enseignement coopératif pour se maintenir dans le programme coopératif. La liaison entre l'étudiante ou l'étudiant, les employeurs et l'Institut d'enseignement coopératif est du ressort du comité du programme coopératif en traduction du Département d'études françaises.

Pour plus de renseignements sur l'Institut d'enseignement coopératif, voir la §24 de cet annuaire.

3. Le programme comporte deux options : la traduction du français vers l'anglais ou de l'anglais vers le français. Normalement, l'étudiante ou l'étudiant choisira l'une ou l'autre de ces deux options. Dans de rares cas, certaines candidates et certains candidats pourront satisfaire aux exigences des deux options.

4. Les étudiantes et étudiants du programme de BA Spécialisation en traduction doivent obtenir une note minimale de C dans tous les cours de traduction. Si la note obtenue est inférieure à C, les étudiantes et étudiants devront reprendre le cours dans l'année qui suit. Une seule reprise est permise. Si cette exigence n'est pas satisfaite ou en cas d'échec, les étudiantes et étudiants seront radiés du programme. En cas de probation ou de radiation, les étudiantes et étudiants recevront un avis écrit de la direction du département.

Option A : français-anglais		6	crédits à choisir entre FTRA 401 ³ et 417 ³ ou ENGL 396 ⁶
1^{re} étape		3	crédits FTRA 409 ³
6	crédits à choisir parmi les cours FRAN 400 ³ et 401 ³ , 402 ⁶ ou 406 ³ et 407 ³		
N.B. : Une étudiante ou un étudiant qui, à l'examen d'admission, n'a pas obtenu une note lui permettant de suivre les cours de niveau 400 peut s'inscrire au(x) cours FRAN 301 ⁶ ou 302 ³ et 303 ³ ou 306 ³ et suivre les cours ci-dessous en 2 ^e année au plus tard.			
*6	crédits ENGL 212 ³ et 213 ³		
6	crédits en littératures de langue française		
6	crédits en littératures de langue anglaise		
9	crédits FTRA 200 ³ , 201 ³ et 207 ³		
2^e étape		12	crédits en littératures de langue française
12	crédits FTRA 203 ³ , 301 ³ , 305 ³ et 310 ³	9	crédits FTRA 200 ³ , 202 ³ et 208 ³
6	crédits de linguistique choisis en consultation avec la conseillère pédagogique ou le conseiller pédagogique	15	crédits FTRA 204 ³ , 304 ³ , 306 ³ , 310 ³ , et FRAN 403 ³
3^e étape		6	crédits en linguistique en consultation avec la conseillère pédagogique ou le conseiller pédagogique
3	crédits à choisir parmi les cours FTRA 403 ³ , 405 ³ , et 408 ³	3	crédits à choisir parmi les cours FTRA 404 ³ , 406 ³ , 408 ³
3	crédits à choisir entre les cours FTRA 412 ³ et 414 ³		
Option F : anglais-français			
1^{re} étape		6	crédits à choisir parmi les cours FRAN 400 ³ et 401 ³ , 402 ⁶ , ou 406 ³ et 407 ³
		*6	crédits ENGL 212 ³ et 213 ³
N.B. : Une étudiante ou un étudiant qui n'est pas admissible au cours ENGL 212 ³ peut s'inscrire aux cours ESL 209 ³ et 210 ³ ou ENGL 206 ³ et suivre les cours ENGL 212 ³ et 213 ³ en 2 ^e année au plus tard.			
		12	crédits en littératures de langue française
		9	crédits FTRA 200 ³ , 202 ³ et 208 ³
		15	crédits FTRA 204 ³ , 304 ³ , 306 ³ , 310 ³ , et FRAN 403 ³
		6	crédits en linguistique en consultation avec la conseillère pédagogique ou le conseiller pédagogique
		3	crédits à choisir parmi les cours FTRA 404 ³ , 406 ³ , 408 ³

- 3 crédits FTRA 410³
- 3 crédits à choisir entre les cours FTRA 412³ et 414³
- 3 crédits FTRA 402³

**L'étudiante ou l'étudiant tenu aux 6 crédits d'ENGL 212³ et 213³ peut les comptabiliser dans les 24 crédits à réaliser hors département. Dans ce cas, pour les remplacer il devra effectuer 6 crédits parmi ceux offerts au département.*

Cours

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Les cours du département ayant reçu de nouveaux numéros, les étudiantes et étudiants trouveront une liste d'équivalences à la section 200.1.

Langue

FRAN 211 *French Language: Elementary* (6 crédits)

This course is restricted to students having no previous training in French. It includes a comprehensive introduction to the basic structures and vocabulary of French and should enable students to acquire an ability to speak and understand simple conversational French. Both oral and written aspects of the language are presented, with special emphasis on oral skills. Laboratory sessions are included.

NOTE: Students who have received credit for FRAN 200 or FRAN 201 may not take this course for credit.

FRAN 212 *Langue française : niveau de transition* (6 crédits)

Préalable : FRAN 211 ou l'équivalent. Ce cours s'adresse aux étudiantes et étudiants ayant suivi soit un an de français à l'université ou au niveau collégial, soit deux ans de français à l'école secondaire ou l'équivalent. Ce cours permet aux étudiantes et étudiants d'accéder à un niveau de compréhension et d'expression suffisant pour communiquer en français oralement et par écrit avec une certaine assurance. Par l'utilisation de techniques de conversation dirigée, de travail systématique en classe et au laboratoire, et d'exercices écrits, les étudiantes et étudiants acquerront un répertoire de structures et un vocabulaire plus étendu. Séances de laboratoire.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 202 ou FRAN 203 ne peuvent obtenir de crédits pour ce cours.

FRAN 213 *Langue française : niveau intermédiaire I et II* (6 crédits)

Préalable : FRAN 212 ou l'équivalent. Ce cours s'adresse aux étudiantes et étudiants ayant suivi soit quatre ans de français à l'école secondaire, soit deux ans de français à l'université ou au niveau collégial ou l'équivalent. Par une étude et une pratique intensive des tournures du français courant, l'étudiante ou l'étudiant pourra acquérir l'aisance nécessaire à une communication orale et écrite spontanée. Le cours permettra également à l'étudiant de mieux comprendre des documents audio-visuels (radio, télévision,

cinéma, etc.).

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 204 ou 205 ou 214 ou 215 ne peuvent obtenir de crédits pour ce cours.

FRAN 214 *Langue française : niveau intermédiaire I* (3 crédits)

Préalable : FRAN 212 ou l'équivalent. Ce cours s'adresse aux étudiantes et étudiants ayant suivi soit 4 ans de français à l'école secondaire, soit 2 ans de français à l'université ou au niveau collégial ou l'équivalent. Par une étude et une pratique intensive des tournures du français courant, l'étudiante ou l'étudiant pourra acquérir l'aisance nécessaire à une communication orale et écrite spontanée. Le cours permettra également à l'étudiant de mieux comprendre des documents audio-visuels (radio, télévision, cinéma, etc.).

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 204 ou 213 ne peuvent obtenir de crédits pour ce cours.

FRAN 215 *Langue française : niveau intermédiaire II* (3 crédits)

Préalable : FRAN 214 ou l'équivalent. Ce cours est la suite du FRAN 214. Il vise, d'une part, à donner à l'étudiant une plus grande aisance dans son utilisation orale du français de même qu'à l'aider à mieux comprendre des documents audio-visuels (radio, télévision, cinéma, etc.). D'autre part, il approfondit les notions grammaticales et intensifie l'usage du français écrit.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 205 ou 213 ne peuvent obtenir de crédits pour ce cours.

FRAN 219 *Initiation au français écrit* (3 crédits)

Préalable : FRAN 212 ou l'équivalent. Ce cours vise, essentiellement l'acquisition des techniques de base du français écrit. Il comporte un renforcement des connaissances de vocabulaire et de grammaire et une initiation à la composition de textes personnels variés.

FRAN 301 *Langue française : niveau d'approfondissement I et II* (6 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Ce cours d'approfondissement est destiné aux

étudiantes et étudiants qui possèdent déjà une bonne connaissance du français et qui ont besoin d'améliorer leur expression écrite et orale. Pratique de la lecture, de la rédaction et de la grammaire.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 302 ou 303 ne peuvent obtenir de crédits pour ce cours.

FRAN 302 Langue française : niveau d'approfondissement I
(3 crédits)

Préalable : FRAN 213 ou l'équivalent. Le cours d'approfondissement est destiné aux étudiantes et étudiants qui possèdent déjà une bonne connaissance du français et qui ont besoin d'améliorer leur expression écrite et orale. Pratique de la lecture, de la rédaction et de la grammaire.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 301 ne peuvent obtenir de crédits pour ce cours.

FRAN 303 Langue française : niveau d'approfondissement II
(3 crédits)

Préalable : FRAN 302 ou l'équivalent. Suite du cours FRAN 302.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 301 ne peuvent obtenir de crédits pour ce cours.

FRAN 305 Communication orale
(3 crédits)

Préalable : FRAN 213 ou l'équivalent. Étude des caractéristiques propres à la langue orale et au déroulement du discours. Initiation à l'identification des niveaux de langue et aux aspects affectifs et situationnels de la langue parlée. Présentations théoriques et applications pratiques sous forme d'exercices d'expression et de compréhension reliés à l'analyse de documents authentiques.

FRAN 306 Communication écrite
(3 crédits)

Préalable : FRAN 301, 303 ou l'équivalent. Acquisition des techniques nécessaires à la rédaction. Étude des différents styles de langue écrite par opposition à ceux de la langue parlée. Pratique de l'analyse et du commentaire de texte.

FRAN 318 Le français commercial I
(3 crédits)

Préalable : FRAN 301, 303 ou l'équivalent. Le cours vise à faciliter la communication efficace orale et écrite dans le domaine des affaires. Il comprend une révision des structures, mais l'effort principal porte sur l'acquisition des termes et tournures de la langue du commerce, de la banque et des affaires. On s'efforce d'enseigner ces termes en simulation de situations réelles, par ex. : au téléphone, entrevues, réunions, rédaction administrative et commerciale. On encourage les étudiantes et étudiants à entreprendre un projet individuel pour approfondir le vocabulaire de leur domaine particulier.

FRAN 319 Le français commercial II
(3 crédits)

Préalable : FRAN 301, 303 ou l'équivalent.
Suite du cours FRAN 318.

FRAN 330 Introduction à la linguistique française I (3 crédits)

Préalable : FRAN 303 ou l'équivalent. Introduction à l'analyse descriptive de la structure linguistique du français contemporain. Aperçus des aspects phonémiques, morphosyntaxiques et lexicaux de la langue considérée comme un système. Applications théoriques et pratiques.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 266 ne peuvent obtenir de crédits pour ce cours.

FRAN 331 Introduction à la linguistique française II (3 crédits)

Préalable : FRAN 330 ou l'équivalent. Suite du cours FRAN 330.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 267 ne peuvent obtenir de crédits pour ce cours.

FRAN 333 Histoire de la langue française
(3 crédits)

Préalable : FRAN 303 ou l'équivalent. Le but de ce cours est de familiariser l'étudiante et l'étudiant avec les grands moments de la langue (Concile de Tours, Édit de Villers Cotterêts, etc.) afin de leur donner une vue panoramique et diachronique de l'évolution du français.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 269 ne peuvent obtenir de crédits pour ce cours.

FRAN 334 Le vocabulaire français
(3 crédits)

Préalable : FRAN 303 ou l'équivalent. Ce cours propose une présentation méthodique des divers aspects du vocabulaire français. Il comporte quatre parties : introduction générale et présentation des outils bibliographiques; origine et évolution des mots; procédés de création lexicale; variation sémantique. Les travaux prendront la forme d'exercices variés de vocabulaire, d'analyses de textes et de recherches lexicales.

N.B. : Avec le cours FRAN 306, ce cours constituerait une bonne préparation aux cours de langue de niveau 400.

FRAN 373 Le cinéma français I (6 crédits)

Ce cours, abondamment illustré de films ou d'extraits de films, retrace, en tout ou en partie, l'histoire du septième art dans ses manifestations les plus originales et les plus caractéristiques.

FRAN 374 Le cinéma français II (6 crédits)

Les étudiantes et étudiants s'inscrivant pour la deuxième fois au cours de FRAN 373 obtiennent les crédits FRAN 374.

FRAN 398 Étude d'un sujet particulier
(3 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

FRAN 400 Langue française : niveau de perfectionnement I (3 crédits)

Préalable : FRAN 303 ou l'équivalent; FRAN 306 recommandé si le résultat en FRAN 303 est de 2.00 ou moins. Cours avancé de langue, axé sur l'étude de la grammaire et de la stylistique françaises, permettant à une étudiante ou un étudiant qui possède déjà une connaissance approfondie de la langue de corriger ses lacunes, de nuancer son expression et d'explorer les possibilités créatrices du langage.

FRAN 401 Langue française : niveau de perfectionnement II (3 crédits)

Préalable : FRAN 400 ou l'équivalent. Cours avancé de langue et de composition, axé sur l'étude de l'utilisation stylistique des temps et d'un certain nombre de techniques, permettant aux étudiantes et aux étudiants d'écrire un texte soigné.

FRAN 402 Initiation à la composition avancée (6 crédits)

Préalable : FRAN 303 ou l'équivalent. Révision de la grammaire. Techniques de mise en œuvre des moyens d'expression écrite et orale. Étude des différentes méthodes d'analyse et de composition, y compris la dissertation. Méthodologie de la présentation des travaux.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 324 ne peuvent obtenir de crédits pour ce cours.

FRAN 403 Rédaction avancée (3 crédits)

Préalable : FRAN 400 et 401 ou 402 ou 406 et 407. Ce cours vise à faire acquérir à l'étudiante ou l'étudiant qui a déjà une bonne maîtrise de la grammaire l'habileté à rédiger des textes de formes diverses. À partir d'une pratique intense de l'écriture, l'étudiante ou l'étudiant apprendra à rédiger des textes qui répondent à un but spécifique de la communication.

FRAN 406 Le code grammatical I (3 crédits)

Préalable : FRAN 303 ou l'équivalent. Étude des règles fondamentales de la grammaire française à l'aide d'exercices d'analyse et de construction de phrases, ayant pour but la correction de l'orthographe et de la syntaxe.

FRAN 407 Le code grammatical II (3 crédits)

Préalable : FRAN 406 ou l'équivalent. Ce cours a pour but de fixer définitivement les connaissances grammaticales pratiques des étudiantes et étudiants, en particulier de celles ou ceux qui envisagent de poursuivre leurs études de français à un niveau supérieur. La norme étudiée dans ce cours tiendra compte à la fois des principes de la grammaire traditionnelle et des progrès récents dans l'étude de la langue. L'étude des unités d'expression mènera, par des exercices pratiques d'analyse fonctionnelle, à l'examen approfondi de certains points de stylistique.

FRAN 408 Le code oratoire (3 crédits)

Préalable : FRAN 303 ou l'équivalent. Ce cours avancé de langue s'adresse aux étudiantes et étudiants cherchant à acquérir une habileté à parler en public ou à la développer. Il porte à la fois sur la transmission et la création de discours oraux : étude des caractéristiques de la langue « oratoire »; acquisition des techniques et des moyens linguistiques appropriés pour établir une communication structurée et vivante avec un auditoire; introduction à la rhétorique et création de discours argumentatifs. Les séances de travaux pratiques permettent aux étudiantes et étudiants d'approfondir les techniques enseignées pendant le cours.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 404 ou 405 ne peuvent obtenir de crédits pour ce cours.

FRAN 409 Cours libre de traduction I (3 crédits)

Préalable : Six crédits parmi FRAN 304; FRAN 305; FRAN 306; FRAN 400; FRAN 401; ou autorisation du département. Étude systématique des anglicismes; notions de méthodologie de la traduction; étude de quelques aspects de la stylistique comparée du français et de l'anglais; travaux pratiques de traduction de l'anglais au français.

N.B. : Ce cours est destiné particulièrement, mais non exclusivement, aux étudiantes et étudiants qui ne se spécialisent pas en traduction.

FRAN 412 Le français des situations administratives et juridiques (3 crédits)

Préalable : FRAN 303, ou l'équivalent. Le cours s'adresse aux étudiantes et étudiants qui, dans leur profession ou celle à laquelle elles ou ils se préparent, doivent utiliser le vocabulaire de l'appareil judiciaire et la terminologie des différentes branches du droit. On étudiera les situations telles que le conflit locataire-propriétaire, les problèmes d'assurance, le contrat de mariage, etc. Par une étude théorique et pratique de divers litiges, par une recherche individuelle et en jouant les rôles de divers personnages en situation, les étudiantes et étudiants approfondiront leurs connaissances de la langue du droit et apprendront à l'utiliser.

FRAN 414 Le français de la technologie (3 crédits)

Préalable : FRAN 303 ou l'équivalent. Ce cours s'adresse aux étudiantes et étudiants qui s'intéressent à la langue technique. Les étudiantes et étudiants se familiariseront avec la terminologie, la syntaxe et le style propres à certains domaines de la technologie. Les travaux comprendront des exercices pratiques de vocabulaire, de style et de rédaction dont le but sera de faciliter l'expression exacte de notions techniques.

FRAN 415 Rédaction technique (3 crédits)

Préalable : FRAN 414 ou l'équivalent. Dans ce cours qui s'adresse aux étudiantes et étudiants

déjà initiés à certains domaines de la technologie, on étudiera la rédaction de documents techniques tels que les résumés de textes, les spécifications, devis, appels d'offres, modes d'emploi, etc. L'effort principal portera sur la rédaction de rapports techniques.

FRAN 418 *Le français de l'économie et du marketing* (3 crédits)

Préalable : FRAN 303 ou l'équivalent. L'étudiante et l'étudiant se familiariseront avec des concepts du système économique au moyen d'une communication axée sur des réalités économiques québécoises, canadiennes et mondiales. Étude approfondie du vocabulaire spécialisé, travaux de rédaction et présentation d'exposés à partir d'une analyse d'articles et de films didactiques sélectionnés dans le domaine.

FRAN 419 *Le français de la finance et de la gestion* (3 crédits)

Préalable : FRAN 303 ou l'équivalent. Ce cours vise à perfectionner l'usage du français spécialisé écrit et oral utilisé dans les relations d'affaires par un examen des difficultés de la langue française et l'étude de concepts à partir d'une documentation axée sur la science de la gestion et de la finance. Étude approfondie du vocabulaire spécialisé et rédaction de travaux dans le contexte des divers domaines de la gestion administrative, financière et celle des ressources humaines.

FRAN 466 *Histoire de la langue française au Québec* (3 crédits)

Préalable : FRAN 400 ou l'équivalent. Aperçu de l'évolution du français au Québec, du XVII^e siècle à nos jours. Étude de la formation du français québécois et des influences internes et externes qu'il a subies au cours du temps. À l'aide de documents provenant d'époques successives, on s'attachera à définir ce qui caractérise les différents états du français parlé et écrit au Québec, sur les plans phonétique, syntaxique et lexical.

FRAN 468 *Étude de la norme* (3 crédits)

Préalable : FRAN 400. Étude des facteurs politiques, sociologiques et psychologiques contribuant à la notion de norme. Analyse et description des écarts par rapport à la norme. Travaux pratiques d'enquête.

FRAN 469 *Sémantique française* (3 crédits)

Préalable : FRAN 400. Étude formelle de la signification et de la segmentation du sens en français fondée sur une approche sémiotique de la langue. L'étudiante et l'étudiant feront l'apprentissage de méthodes d'analyse leur permettant d'inventorier les effets de sens et de les ordonner en fonction de critères objectifs.

FRAN 470 *Stylistique avancée* (3 crédits)

Préalable : FRAN 400 ou autorisation du département. Étude de l'articulation entre des procédés

d'expression lexicologiques, syntaxiques et rhétoriques, et leurs effets sémantiques. Ce cours permettra aux étudiantes et aux étudiants d'améliorer leur capacité à rédiger différents types d'écrits structurés et nuancés.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 366 ne peuvent obtenir de crédits pour ce cours.

FRAN 471 *Questions actuelles en linguistique française* (3 crédits)

Préalable : FRAN 400 ou autorisation du département. Étude d'une question particulière du domaine de la linguistique, intéressant les étudiantes et les étudiants en langue, littérature, traduction et didactique. Pourront être abordées les méthodologies suivantes : analyse du discours, théorie de l'énonciation, linguistique du texte, pragmatique, linguistique statistique, psycholinguistique, lexicologie.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 367 ne peuvent obtenir de crédits pour ce cours.

FRAN 481 *Évolution de l'enseignement du français : principes et méthodes* (3 crédits)

Préalable : FRAN 400 ou l'équivalent. Panorama historique de l'enseignement du français langue maternelle, langue étrangère et langue seconde. Une attention particulière sera portée à la conception de la langue et de la culture à la base des méthodes et des programmes d'enseignement. Étude de l'état actuel de l'enseignement du français dans le monde.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 381 ne peuvent obtenir de crédits pour ce cours.

FRAN 482 *Le matériel didactique : analyse et création* (3 crédits)

Préalable : FRAN 400 ou l'équivalent. Étude critique du matériel utilisé pour l'enseignement du français dans des cadres et à des niveaux de compétence divers. Analyse comparative du matériel destiné à l'enseignement du français langue maternelle et du français langue seconde ou étrangère. Application de ces connaissances à la création et à l'adaptation de matériel didactique.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 382 ne peuvent obtenir de crédits pour ce cours.

FRAN 485 *Étude d'un sujet particulier en didactique du français* (3 crédits)

Préalable : FRAN 400 ou l'équivalent. Étude approfondie d'un aspect particulier de l'enseignement et de l'apprentissage du français. Parmi les sujets possibles : enseignement de la grammaire, de la lecture, du vocabulaire, de la culture; évaluation de l'apprentissage; acquisition du français langue maternelle et langue seconde; enseignement du français et alphabé-

tisation; pédagogie de l'interculturel.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 385 ne peuvent obtenir de crédits pour ce cours.

FRAN 486 Pratiques d'enseignement
(3 crédits)

Préalable : FRAN 400 ou l'équivalent. Travaux pratiques : préparation de plans de cours, élaboration de leçons-types, initiation aux techniques d'animation de groupe et aux méthodes d'évaluation de l'apprentissage; mise en application dans des classes de français langue seconde.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 488 ne peuvent obtenir de crédits pour ce cours.

FRAN 491 Tutorat en langue, linguistique ou didactique (3 crédits)

Préalable : 12 crédits de langue, de linguistique ou de didactique au niveau « 400 ». Étude d'un sujet particulier dans le domaine de la langue, de la linguistique ou de la didactique.

FRAN 498 Étude avancée d'un sujet particulier (3 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

Littérature

FLIT 220 Textes littéraires (3 crédits)

Préalable : FRAN 213, 215 ou l'équivalent. Au moyen d'un choix de nouvelles, romans, pièces de théâtre et poèmes de la francophonie, l'étudiante ou l'étudiant apprendra à « lire » et à apprécier les caractéristiques des différents genres.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 220 ne peuvent obtenir de crédits pour ce cours.

FLIT 230 Introduction à la culture francophone (3 crédits)

Ce cours vise à familiariser les étudiantes et étudiants non francophones à la culture francophone et à sa diversité. Une étude sociale, historique, linguistique et culturelle permettra aux étudiants et étudiantes de s'interroger sur ce qu'est la francophonie et sur la spécificité francophone.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 270 ne peuvent obtenir de crédits pour ce cours.

FLIT 240 Introduction à la littérature francophone (3 crédits)

Ce cours vise à familiariser les étudiantes et étudiants non francophones à la littérature d'expression française. On lira dans ce cours des œuvres représentatives de la diversité du monde francophone.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 271 ne peuvent obtenir de crédits pour ce cours.

FLIT 250 Culture populaire en France et au Québec (3 crédits)

Étude comparée de la culture populaire en France et au Québec de 1967 à nos jours : les événements historiques, la littérature, la presse, la mode, la chanson, la télévision, le cinéma, la publicité.

FLIT 298 Étude d'un sujet particulier
(3 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi un cours FRAN 298 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FLIT 300 Littérature et culture françaises du Moyen Âge au XVIII^e siècle
(3 crédits)

Aperçu général de la littérature française du Moyen Âge, de la Renaissance et du XVII^e siècle et du contexte historique, social et culturel qui a donné naissance aux œuvres de l'époque.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 320 ou 321 ne peuvent obtenir de crédits pour ce cours.

FLIT 302 Littérature et culture françaises du XVIII^e au XX^e siècles (3 crédits)

Aperçu général de la littérature française des XVIII^e, XIX^e et XX^e siècles et du contexte historique, social et culturel qui a donné naissance aux œuvres de l'époque.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 320 ou 322 ne peuvent obtenir de crédits pour ce cours.

FLIT 303 Culture et littérature québécoises de 1534 à 1900
(3 crédits)

Panorama de la littérature québécoise, de la Nouvelle-France à la fin du XIX^e siècle, vue dans une perspective socio-historique. Par l'étude de textes significatifs, on retracera le processus historique de différenciation et d'affirmation collective des Québécoises et Québécois.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 251 ou 252 ne peuvent obtenir de crédits pour ce cours.

FLIT 305 Culture et littérature québécoises : le XX^e siècle
(3 crédits)

Panorama de la littérature québécoise du XX^e siècle vue dans une perspective socio-historique. Étude des grandes étapes de la production littéraire avec, comme toile de fond, un aperçu général de l'histoire politique, économique, sociale et culturelle du Québec. Étude des principaux courants de pensée.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 251 ou 253 ne peuvent obtenir de crédits pour ce cours.

FLIT 308 *Le quotidien de la francophonie* (3 crédits)
 Étude de la culture de pays francophones (principalement de l'Afrique, des Antilles ou d'autres pays entièrement ou partiellement francophones). Ce cours a pour but, au moyen de documents imprimés et audio-visuels, de faire connaître les conditions socio-politiques de ces pays plutôt que l'histoire des faits exceptionnels.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 364 ne peuvent obtenir de crédits pour ce cours.

FLIT 310 *Le Moyen Âge* (3 crédits)
 Introduction à la lecture des premières œuvres de la littérature française : chansons de geste, lais, romans, poésie, théâtre, fabliaux et nouvelles, chroniques et écrits didactiques. Présentation de leur contexte culturel : le monde féodal et la société urbaine, la culture savante et la culture populaire, les milieux intellectuels et artistiques.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 420 ne peuvent obtenir de crédits pour ce cours.

FLIT 312 *La Renaissance française : questions et perspectives* (3 crédits)
 Étude des mythes, des valeurs, des symboles qui structurent le monde mental des « acteurs » de la Renaissance française. Les cercles et les foyers de rayonnement intellectuel notables (la Cour, Lyon, les collèges) sont étudiés en détail.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 425 ne peuvent obtenir de crédits pour ce cours.

FLIT 314 *Le XVII^e siècle : l'univers théâtral* (3 crédits)
 Étude de la pastorale, de la comédie, de la tragédie et de la tragi-comédie. Importance du théâtre au XVII^e siècle : scénographie, poétique et dramaturgie. Sources et réception des œuvres dramatiques.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 429 ne peuvent obtenir de crédits pour ce cours.

FLIT 316 *La naissance et la diffusion des Lumières en France* (3 crédits)
 Analyse de l'émergence d'un pouvoir intellectuel de plus en plus autonome en France au XVIII^e siècle, par rapport à l'Église, par rapport à l'État. Étude du cadre historique et littéraire dans lequel s'est formée et affirmée la philosophie des Lumières.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 432 ne peuvent obtenir de crédits pour ce cours.

FLIT 318 *Le XIX^e siècle : roman et société* (3 crédits)
 Étude du rôle du progrès (science, socialisme, utopies) dans la constitution du roman du XIX^e

siècle. Analyse de l'intégration dans la littérature de diverses formes discursives qui permettent au roman social de refléter les transformations historiques et politiques.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 440 ne peuvent obtenir de crédits pour ce cours.

FLIT 320 *Le XX^e siècle : les métamorphoses du roman* (3 crédits)
 Étude de l'évolution du roman au XX^e siècle en France et de l'émergence de nouvelles structures romanesques. De la sottise gidiennne au Nouveau Roman, le roman n'a cessé de redéfinir son genre, d'emprunter à d'autres discours narratifs et de faire éclater la forme du roman réaliste.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 446 ne peuvent obtenir de crédits pour ce cours.

FLIT 341 *Le roman québécois jusqu'en 1960* (3 crédits)
 La pratique romanesque de 1900 à 1960 dans la réalité socio-politique et culturelle. Du roman de la fidélité au roman de l'interrogation, en passant par le roman d'observation, le roman de la critique sociale et le roman de l'exploration intérieure. (Re)lecture des œuvres marquantes dont plusieurs, grâce à la radio, au cinéma et à la télévision, ont joué un rôle important dans la formation de l'imaginaire québécois.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 352 ne peuvent obtenir de crédits pour ce cours.

FLIT 343 *Le roman québécois contemporain* (3 crédits)
 La pratique romanesque depuis la Révolution tranquille : évolutions et orientations. On insistera sur les aspects suivants : rupture, modernité et post-modernité; poétique et politique; diversité des pratiques : des recherches formelles aux « belles histoires »; éclatement de l'espace fictionnel, sous la poussée notamment des écritures de femmes et des écritures (im)migrantes. La lecture de textes marquants sera proposée aux étudiants et étudiantes.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 353 ne peuvent obtenir de crédits pour ce cours.

FLIT 345 *Le théâtre québécois jusqu'en 1960* (3 crédits)
 Vue d'ensemble du phénomène théâtral, des origines à 1960 : conditions dans lesquelles est né et s'est développé le théâtre : genres affectuonnés au XIX^e siècle et au début du XX^e : théâtre historique, mélodrame, burlesque; « les premières modernités » (1930–1965). Une attention particulière sera accordée à cette dernière période dont l'effervescence favorise la naissance du théâtre québécois moderne, signalée par l'apparition de nombreuses fondations institutionnelles et par l'entrée en scène de Gélinas, puis de Dubé, Ferron, Gauvreau, Languirand,

Loranger. Un choix de textes sera proposé à l'étude.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 356 ne peuvent obtenir de crédits pour ce cours.

FLIT 347 *Le théâtre québécois contemporain* (3 crédits)

Évolution du théâtre québécois depuis 1960 : théories et pratiques. Identification et étude des principaux axes de son développement : « nouveau » théâtre québécois; création collective et engagement; théâtre expérimental; théâtre de femmes; théâtre des frontières du langage et de l'identité; théâtre et publics, etc. Situation du théâtre dans le réseau des discours esthétiques et socio-culturels. Étude de dramaturges et de pièces marquants. En plus d'avoir recours aux textes, ce cours s'appuiera d'une façon particulière sur la production montréalaise courante.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 357 ne peuvent obtenir de crédits pour ce cours.

FLIT 349 *L'essai au Québec* (3 crédits)

Étude des grands thèmes et de l'évolution des formes de la pensée québécoise à travers l'essai. Analyse des regards pluriels portés sur la culture, la politique. Évaluation de ces composantes mouvantes dans la configuration de la société québécoise actuelle. Lecture d'œuvres représentatives.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 358 ne peuvent obtenir de crédits pour ce cours.

FLIT 360 *Littérature de la francophonie au féminin* (3 crédits)

Introduction à l'écriture des femmes francophones, principalement d'Afrique et des Caraïbes ou d'autres pays entièrement ou partiellement francophones. Analyse du regard particulier qu'elles posent sur elles-mêmes et sur la société. Étude des rapports qu'elles entretiennent avec le français (langue maternelle, langue d'usage, langue imposée...). Évaluation de l'apport spécifique de ces femmes à la littérature de leur pays.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 360 ne peuvent obtenir de crédits pour ce cours.

FLIT 362 *Littérature maghrébine* (3 crédits)

Histoire de la littérature marocaine, algérienne et tunisienne écrite directement en français par des écrivains d'origine arabe ou berbère. Marquée par les influences combinées de la culture française et de l'Islam, cette littérature sera étudiée dans son développement et sa spécificité. Lecture et analyse d'œuvres marquantes datant de l'époque coloniale jusqu'à nos jours.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 256 ne peuvent obtenir de crédits pour ce cours.

FLIT 364 *Littératures africaine et antillaise* (3 crédits)

Histoire et développement de la littérature de langue française des Antilles et d'Afrique subsaharienne au XX^e siècle. Issue de l'époque coloniale, cette littérature sera étudiée en fonction de la grande mutation des années soixante et de la problématique géopolitique des années qui ont suivi les indépendances. Lecture et analyse d'œuvres marquantes provenant de divers pays membres de la francophonie.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 257 ne peuvent obtenir de crédits pour ce cours.

FLIT 370 *Les genres narratifs* (3 crédits)

Étude comparée de plusieurs genres narratifs (réalisme, fantastique, etc.) en vue d'en dégager les traits thématiques et discursifs distinctifs. Les genres étudiés sont replacés dans l'histoire de leur émergence pour être analysés dans leur état contemporain.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 370 ne peuvent obtenir de crédits pour ce cours.

FLIT 372 *Le genre poétique* (3 crédits)

Description de la poésie de langue française dans ses aspects formels et thématiques. Étude de la poétique (vers régulier, vers libre, formes fixes, poèmes en prose, poésie expérimentale). Lecture et analyse de textes choisis en fonction de leur importance historique ou de leur intérêt propre.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 371 ne peuvent obtenir de crédits pour ce cours.

FLIT 374 *Le genre dramatique : analyses et pratiques* (3 crédits)

Étude des caractéristiques du théâtre en tant que genre. Analyse de sa fonction littéraire et sociale et de la place qu'il occupe dans l'évolution de la théorie esthétique. On aura recours à un choix de textes dramatiques et théoriques.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 372 ne peuvent obtenir de crédits pour ce cours.

FLIT 380 *Texte et image* (3 crédits)

Analyse des liens qui unissent le texte et l'image et qui peuvent se manifester sous diverses formes artistiques. On s'attachera à une époque et à une problématique particulières qui permettront de mieux comprendre les rapports du visuel et du littéraire.

FLIT 398 *Étude d'un sujet particulier* (3 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi un cours FRAN 398 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FLIT 410 *La naissance du roman au Moyen Âge* (3 crédits)

Le roman naissant et la société courtoise (XII^e siècle). Sources et thématiques : l'Antiquité, la « matière de Bretagne », l'Orient. Motifs, personnages et structures narratives, les grands cycles (XIII^e siècle) : Arthur, Tristan, Lancelot, Le Graal.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 421 ne peuvent obtenir de crédits pour ce cours.

FLIT 412 *La création littéraire en France au XVI^e siècle* (3 crédits)

La création littéraire (en prose et en poésie) comme cristallisation, polarisation de l'imaginaire de la Renaissance et comme référence à l'humanisme. Étude des œuvres majeures du XVI^e siècle dans leurs rapports au pétrarquisme, au maniérisme, au baroque.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 426 ne peuvent obtenir de crédits pour ce cours.

FLIT 414 *L'écriture moraliste et intime au XVII^e siècle* (3 crédits)

Émergence du monde intérieur (moral et spirituel) dans les récits spéculaires des moralistes, mémorialistes et épistoliers. Cosmographie, cartographie, anatomie et écriture moraliste.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 431 ne peuvent obtenir de crédits pour ce cours.

FLIT 416 *La création littéraire au XVIII^e siècle* (3 crédits)

La vitalité du conte, du roman, du théâtre est indéniable au XVIII^e siècle, siècle de tensions, de confrontations, de rêve. Le militantisme des écrivains-philosophes s'accompagne d'une idéologie de bonheur, de la liberté. Analyse des œuvres qui ponctuent l'évolution littéraire et philosophique de ce siècle.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 435 ne peuvent obtenir de crédits pour ce cours.

FLIT 418 *Du Romantisme à l'orée de la modernité* (3 crédits)

À partir du « mal de siècle » français, analyse des transformations successives du rôle des écrivains (poètes, dramaturges, romanciers, essayistes) dans une société marquée par une industrialisation croissante, de nouvelles découvertes scientifiques et d'importants bouleversements socio-politiques. Le choix de textes permettra d'étudier les différentes voies empruntées par les Romantiques (repli sur soi, engagement social, renouvellement des genres), la participation plus active des femmes à l'institution littéraire, le passage au réalisme et les premières transformations de celui-ci.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 438 et 439 ne peuvent obtenir de crédits pour ce cours.

FLIT 420 *Du réalisme à l'esprit « fin de siècle »* (3 crédits)

Étude des multiples tendances qui caractérisent la deuxième partie du dix-neuvième siècle. Cette période est marquée par le passage du réalisme au naturalisme, par l'apogée et la mise en question du roman « bien construit ». Elle verra aussi la naissance de nouveaux genres, tels que le roman policier ou d'anticipation, ainsi que l'éclatement des formes poétiques. Les dernières années seront aussi celles de la décadence et de l'esprit « fin-de-siècle ».

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 441 ne peuvent obtenir de crédits pour ce cours.

FLIT 422 *La poésie et le théâtre des avant-gardes* (3 crédits)

Analyse de la notion de rupture avec la littérature contemporaine à l'œuvre dans divers courants poétiques et dramaturgiques tout au long du XX^e siècle. À travers les œuvres des dadaïstes, des surréalistes, des lettristes, des oulipiens, des tenants du théâtre existentialiste, absurde ou encore du théâtre de la cruauté, on retrouve ce même souci de rompre avec l'espace littéraire contemporain, de renouveler la poésie et le théâtre par des textes de création, des critiques littéraires ou encore des manifestes.

FLIT 424 *La littérature française actuelle* (3 crédits)

Aperçu de la littérature française des trente dernières années, marquée par plusieurs phénomènes, dont la reconfiguration des genres et des structures, la post-modernité, l'écriture au féminin, la revendication de la différence, la réhabilitation du « polar », la remise en question de la théorie et l'émergence d'une multi-culture qui témoigne des phénomènes migratoires inhérents au « village global ».

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 448 ne peuvent obtenir de crédits pour ce cours.

FLIT 441 *Imaginaire québécois : mythes et symboles* (3 crédits)

Identification, description, évolution des grands symboles et archétypes de l'imaginaire québécois en littérature. On se servira de textes relevant aussi bien de la littérature canonique que de la littérature dite « populaire » ou appartenant à des genres mineurs.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 450 ne peuvent obtenir de crédits pour ce cours.

FLIT 443 *La poésie québécoise* (3 crédits)

Histoire de la poésie de langue française au Québec, des origines à nos jours. Étude des mouvements et des formes à travers le temps, et lecture des œuvres les plus significatives. On insistera sur l'émergence progressive de la modernité et sur la spécificité des thèmes du répertoire poétique québécois, au confluent de

l'histoire et des bouleversements sociaux.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 354 ou 355 ne peuvent obtenir de crédits pour ce cours.

FLIT 445 *Le fantastique et la littérature populaire* (3 crédits)

La présence du fantastique dans la littérature québécoise et l'influence de la tradition populaire au niveau des thèmes et des structures. Textes choisis dans l'ensemble de la production littéraire.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 453 ne peuvent obtenir de crédits pour ce cours.

FLIT 447 *Les Voix de Montréal* (3 crédits)

À travers des textes d'écrivaines et d'écrivains montréalais, on cherchera à rendre compte de la dimension plurielle de l'écriture et de la culture québécoises. On privilégiera les parcours transculturels des auteures et auteurs venus d'un ailleurs géographique et culturel, mais qui inscrivent leurs différences dans le texte québécois par la publication ou la traduction de leurs œuvres en français.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 460 ne peuvent obtenir de crédits pour ce cours.

FLIT 449 *Littérature québécoise - Canadian Literature* (3 crédits)

Étude comparée des littératures québécoise et canadienne-anglaise. Analyse thématique, idéologique et stylistique. Examen des similitudes, des analogies et des traits distinctifs. Textes choisis à la fois parmi les œuvres traditionnelles et les œuvres contemporaines.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 455 ou 456 ne peuvent obtenir de crédits pour ce cours.

FLIT 450 *Paralittératures* (3 crédits)

Étude de quelques genres romanesques (roman d'aventures, roman d'amour, policier, série noire, espionnage, science-fiction...) maintenus en marge de la littérature dans les cultures francophones contemporaines. Classements des textes dans l'espace social en fonction des discours dont ils sont porteurs. Analyse sociologique des conditions de production, de diffusion et de consommation des textes.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 454 ne peuvent obtenir de crédits pour ce cours.

FLIT 452 *Littérature pour la jeunesse* (3 crédits)

L'évolution de la littérature produite ou adaptée pour la jeunesse, du XVII^e siècle à la fin du XX^e siècle. Son état actuel; rapports avec la littérature générale : aspects éthiques, esthétiques et didactiques. Étude approfondie d'œuvres marquantes de la francophonie, particulièrement au Québec.

FLIT 460 *Littératures européennes d'expression française* (3 crédits)

Cours d'introduction, à partir de textes littéraires et autres documents imprimés ou audio-visuels, à la culture de pays européens entièrement ou partiellement de langue française, à l'exception de la France.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 462 ne peuvent obtenir de crédits pour ce cours.

FLIT 462 *Littératures canadiennes-françaises* (3 crédits)

Cours d'introduction, à partir de textes littéraires et autres documents imprimés ou audio-visuels, à la culture des francophones canadiens à l'extérieur du Québec.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 463 ne peuvent obtenir de crédits pour ce cours.

FLIT 471 *La littérature québécoise au féminin* (3 crédits)

Étude des principales écrivaines québécoises et de l'évolution de la conscience féminine. Analyse de la représentation qu'elles font d'elles-mêmes et du monde, de leurs modes d'expression et de l'influence du féminisme sur le littéraire. Textes choisis dans l'ensemble de la production des femmes, avec une attention particulière à l'écriture des jeunes écrivaines.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 451 ne peuvent obtenir de crédits pour ce cours.

FLIT 472 *La littérature française au féminin : perspective historique* (3 crédits)

À partir de manifestes et d'œuvres de création, on retracera différentes manifestations de la prise de conscience « féministe » chez les écrivaines françaises, ainsi que les solutions envisagées aux problèmes posés. Ce cours permettra de considérer les tendances actuelles dans une perspective historique.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 476 ne peuvent obtenir de crédits pour ce cours.

FLIT 474 *La littérature française au féminin : nos contemporaines* (3 crédits)

Ce cours portera sur l'éclatement qui caractérise l'écriture au féminin à l'heure actuelle. On étudiera différents concepts tels que la « prise de parole », la valorisation de l'*anima*, le renversement des mythes anciens, ainsi que la révolution formelle et stylistique qui accompagne cet éclatement.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 477 ne peuvent obtenir de crédits pour ce cours.

FLIT 480 *Approches critiques du texte* (3 crédits)

Étude de méthodes diverses choisies parmi les

théories formaliste, structuraliste, philosophique, sociologique, sémiotique, psychanalytique, herméneutique, stylistique et philologique. Application des méthodes à plusieurs types de textes.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 479 ne peuvent obtenir de crédits pour ce cours.

FLIT 494 Tutorat en littérature (3 crédits)
 Préalable : 12 crédits en littérature et autorisation du département. Étude d'un sujet particulier dans le domaine de la littérature.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 494 ne peuvent obtenir de crédits pour ce cours.

FLIT 495 Tutorat en littérature (3 crédits)
 Préalable : 12 crédits en littérature et autorisation du département. Étude d'un sujet particulier dans le domaine de la littérature.
N.B. : Toute étudiante et tout étudiant s'inscrivant pour la seconde fois au cours FLIT 494 obtient les crédits FLIT 495.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 495 ne peuvent obtenir de crédits pour ce cours.

FLIT 496 Recherche dirigée (6 crédits)
 Préalable : 12 crédits dans la spécialité et autorisation du département. Ce cours n'est ouvert qu'aux étudiantes et étudiants des programmes de majeure, de spécialisation ou d'honneurs. Il offre l'occasion d'approfondir l'étude d'un sujet à déterminer par l'étudiante ou l'étudiant en accord avec sa conseillère ou son conseiller et/ou une professeure ou un professeur du département. Chaque étudiante et étudiant exécute des travaux individuels sous le contrôle de la professeure ou du professeur spécialiste de la matière.
N.B. : Les étudiantes et étudiants qui ont suivi FRAN 496 ne peuvent obtenir de crédits pour ce cours.

FLIT 498 Étude d'un sujet particulier (3 crédits)
 Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.
N.B. : Les étudiantes et étudiants qui ont suivi un cours FRAN 498 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

Traduction

FTRA 200 Méthodologie de la traduction (3 crédits)
 Préalable : ENGL 207 et FRAN 306 ou équivalent. Ce cours a pour but d'initier l'étudiante et l'étudiant aux problèmes de la traduction. Il sera une introduction générale aux différentes approches du texte à traduire : analyse du discours, grammaire contrastive, stylistique comparée, terminologie et recherche documentaire.
N.B. : Ce cours comporte plusieurs sections, les unes réservées aux étudiantes et étudiants de

l'option française, les autres à celles et ceux de l'option anglaise.
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 200 ne peuvent obtenir de crédits pour ce cours.

FTRA 201 Traduction générale du français à l'anglais I (3 crédits)
 Préalable : FTRA 200. Traduction du français à l'anglais de textes généraux et analyse des problèmes liés au transfert linguistique. (A)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 201 ou 202 ne peuvent obtenir de crédits pour ce cours.

FTRA 202 Traduction générale de l'anglais au français I (3 crédits)
 Préalable : FTRA 200. Traduction de l'anglais au français de textes généraux et analyse des problèmes liés au transfert linguistique. (F)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 201 ou 202 ne peuvent obtenir de crédits pour ce cours.

FTRA 203 L'anglais en contact avec le français au Québec (3 crédits)
 Ce cours s'adresse aux étudiantes et étudiants anglophones en traduction, langue, littérature et didactique. Il les sensibilisera aux problèmes liés au contact de l'anglais avec le français au Québec et leur permettra de corriger leurs propres erreurs de façon systématique. Le cours est axé sur la langue écrite et on travaillera uniquement sur des textes journalistiques.

FTRA 204 Le français en contact avec l'anglais au Québec (3 crédits)
 Ce cours s'adresse aux étudiantes et étudiants francophones en traduction, langue, littérature et didactique. Il les sensibilisera aux problèmes liés au contact du français avec l'anglais au Québec et leur permettra de corriger leurs propres erreurs de façon systématique. Le cours est axé sur la langue écrite et on travaillera uniquement sur des textes journalistiques.

FTRA 207 Traduction générale du français à l'anglais II (3 crédits)
 Préalable : FTRA 200. Ce cours s'adresse aux étudiantes et étudiants anglophones et porte sur la traduction du français à l'anglais de textes généraux, et sur l'analyse des problèmes liés au transfert linguistique. (A)

FTRA 208 Traduction générale de l'anglais au français II (3 crédits)
 Préalable : FTRA 200. Ce cours s'adresse aux étudiantes et étudiants francophones et porte sur la traduction de l'anglais au français de textes généraux, et sur l'analyse des problèmes liés au transfert linguistique. (F)

FTRA 298 Étude d'un sujet particulier (3 crédits)
N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 298 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 299 Étude d'un sujet particulier
(6 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 299 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 301 Traduction littéraire du français à l'anglais (3 crédits)

Préalable : FTRA 201. Sensibilisation aux problèmes spécifiques à la traduction littéraire. Travaux pratiques : traduction de textes de genres variés. (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 301 ou 302 ne peuvent obtenir de crédits pour ce cours.

FTRA 304 Traduction littéraire de l'anglais au français (3 crédits)

Préalable : FTRA 202. Sensibilisation aux problèmes spécifiques à la traduction littéraire. Travaux pratiques : traduction de textes de genres variés. (F)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 303 ou 304 ne peuvent obtenir de crédits pour ce cours.

FTRA 305 Initiation à la traduction économique du français à l'anglais (3 crédits)

Préalable : FTRA 207. Sensibilisation aux problèmes que pose dans le domaine de l'économie la traduction du français à l'anglais. (A)

FTRA 306 Initiation à la traduction économique de l'anglais au français (3 crédits)

Préalable : FTRA 208. Sensibilisation aux problèmes que pose dans le domaine de l'économie la traduction de l'anglais au français. (F)

FTRA 310 Initiation à la recherche documentaire et terminologique (3 crédits)

Préalable : FTRA 201 ou 202. Le cours fournit les outils permettant de repérer les problèmes de terminologie en traduction. Sont traités : les cheminements documentaire et terminologique (terminologie bilingue ou unilingue, langues de spécialités); la création de produits terminographiques (surtout thématiques); l'intervention linguistique et ses modalités (perspective sociolinguistique). (F/A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 310 ne peuvent obtenir de crédits pour ce cours.

FTRA 398 Étude d'un sujet particulier
(3 crédits)

N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 398 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 399 Étude d'un sujet particulier
(6 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 399 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 401 Traduction littéraire avancée : du français à l'anglais
(3 crédits)

Préalables : FTRA 301. Étude des différents principes et des différentes techniques de la traduction littéraire; aperçu de la traduction littéraire au Canada. Travaux pratiques : analyse critique et comparaison de traductions et de leur original; traduction de textes français. (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 401 ne peuvent obtenir de crédits pour ce cours.

FTRA 402 Traduction littéraire avancée : de l'anglais au français
(3 crédits)

Préalables : FTRA 304. Étude des différents principes et des différentes techniques de la traduction littéraire; aperçu de la traduction littéraire au Canada. Travaux pratiques : analyse critique et comparaison de traductions et de leur original; traduction de textes anglais. (F)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 402 ne peuvent obtenir de crédits pour ce cours.

FTRA 403 Traduction scientifique et technique du français à l'anglais (3 crédits)

Préalable : FTRA 201. Initiation aux différents problèmes de la traduction dans les langues de spécialités scientifiques et techniques (français-anglais). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé en traduction. (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 403 ne peuvent obtenir de crédits pour ce cours.

FTRA 404 Traduction scientifique et technique de l'anglais au français (3 crédits)

Préalable : FTRA 202. Initiation aux différents problèmes de la traduction dans les langues de spécialités scientifiques et techniques (anglais-français). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé en traduction. (F)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 404 ne peuvent obtenir de crédits pour ce cours.

FTRA 405 Traduction commerciale et juridique du français à l'anglais (3 crédits)

Préalable : FTRA 201. Initiation aux différents

problèmes de la traduction dans les langues de spécialités de l'administration, du commerce et du droit (français-anglais). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé en traduction. (A)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 405 ne peuvent obtenir de crédits pour ce cours.

FTRA 406 Traduction commerciale et juridique de l'anglais au français (3 crédits)

Préalable : FTRA 202. Initiation aux différents problèmes de la traduction dans les langues de spécialités de l'administration, du commerce et du droit (anglais-français). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé. (F)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 406 ne peuvent obtenir de crédits pour ce cours.

FTRA 408 Adaptation publicitaire (3 crédits)

Préalable : FTRA 201 ou 202. Initiation à l'adaptation de textes publicitaires. À partir d'exemples empruntés à la publicité écrite, radiophonique ou télévisée, les étudiantes et étudiants seront amenés à se familiariser avec les problèmes linguistiques, affectifs et sociaux soulevés par le travail d'adaptation. (F/A)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 408 ne peuvent obtenir de crédits pour ce cours.

FTRA 409 Révision et correction en traduction (3 crédits)

Préalables : FTRA 301. Ce cours abordera les différentes méthodes de révision et de correction de textes rédigés ou traduits en anglais; il sensibilisera les étudiantes et étudiants aux aspects humains et techniques du métier de réviseur et réviseuse; on touchera aussi aux problèmes de l'évaluation de la qualité des traductions. (A)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 409 ou 410 ne peuvent obtenir de crédits pour ce cours.

FTRA 410 Révision et correction en traduction (3 crédits)

Préalables : FTRA 304. Ce cours abordera les différentes méthodes de révision et de correction de textes rédigés ou traduits en français; il sensibilisera les étudiantes et étudiants aux aspects humains et techniques du métier de réviseur et réviseuse; on touchera aussi aux problèmes de l'évaluation de la qualité des traductions. (F)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 409 ou 410 ne peuvent obtenir de crédits pour ce cours.

FTRA 412 Théories de la traduction (3 crédits)

Préalable : FTRA 301 ou 304. Ce cours est une

initiation aux différentes théories actuelles de la traduction. Est examiné l'apport de secteurs disciplinaires clés tels que la linguistique, la sémiotique, la sociocritique, dans le développement de la traductologie moderne. (F/A)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 412 ne peuvent obtenir de crédits pour ce cours.

FTRA 414 Histoire de la traduction (3 crédits)

Préalable : FTRA 301 ou 304. Cours d'initiation à l'histoire de la traduction où sont traités les grands courants de la traduction depuis l'Antiquité classique. Sera également abordée la traduction dans certaines sociétés non occidentales. On procèdera par thèmes et par aires géographiques en mettant l'accent sur les époques-clés de grands changements politiques et culturels. (F/A)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 414 ne peuvent obtenir de crédits pour ce cours.

FTRA 416 Informatique et traduction (3 crédits)

Préalable : FTRA 201 ou 202, et connaissance du traitement de textes. Ce cours porte sur la langue de l'informatique, la théorie et les concepts fondamentaux qui s'y rapportent. Il comporte des exercices de traduction, et une initiation aux outils informatisés pour les traducteurs : Internet, bases de données, systèmes de traduction assistée, utilitaires. (F/A)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 416 ne peuvent obtenir de crédits pour ce cours.

FTRA 417 Stylistique anglaise pour la traduction (3 crédits)

Préalable : FTRA 310. Ce cours permettra aux étudiantes et étudiants qui traduisent vers l'anglais de maîtriser les principes stylistiques de cette langue. (A)

FTRA 420 Stage de formation : de l'anglais au français (6 crédits)

Préalable : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction de l'anglais au français et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et tous les candidats.) (F)
N.B. : Les étudiantes et étudiants qui ont suivi TRAD 420 ne peuvent obtenir de crédits pour ce cours.

FTRA 421 Stage de formation : du français à l'anglais (6 crédits)

Préalable : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante

ou l'étudiant à l'activité professionnelle dans le domaine de la traduction du français à l'anglais et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et tous les candidats.) (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 421 ne peuvent obtenir de crédits pour ce cours.

FTRA 422 Stage de formation : de l'anglais au français I
(3 crédits)

Préalable : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction de l'anglais au français et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (F)

FTRA 423 Stage de formation : du français à l'anglais I (3 crédits)

Préalable : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction du français à l'anglais et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (A)

FTRA 424 Stage de formation : de l'anglais au français II
(3 crédits)

Préalable : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le

domaine de la traduction de l'anglais au français et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (F)

FTRA 425 Stage de formation : du français à l'anglais II (3 crédits)

Préalable : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction du français à l'anglais et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (A)

FTRA 492 Tutorat en traduction
(3 crédits)

Préalable : 12 crédits de traduction au niveau « 400 » et permission du département. Étude d'un sujet particulier dans le domaine de la traduction.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 492 ne peuvent obtenir de crédits pour ce cours.

FTRA 498 Étude avancée d'un sujet particulier (3 crédits)

N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 498 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 499 Étude avancée d'un sujet particulier (6 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 499 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

31.120

EXERCISE SCIENCE

Faculty	<p><i>Chair</i> WILLIAM R. SELLERS, Associate Professor</p> <p><i>Associate Professors</i> LOUIS W. JANKOWSKI ROBERT D. KILGOUR SHIPING MA DAVID L. PARIS</p> <p><i>Assistant Professor</i> ROBERT BOUSHEL RICHARD DEMONT</p>	<p><i>Lecturers</i> ALAIN LEROUX GEORGE D. SHORT</p> <p><i>Adjunct Professors</i> BARRY GAMBERG ILKA LOWENSTEYN RICHARD POUND STUART ROBERTSON KEITH MICHAEL WILKINSON</p>
Location	<p><i>Loyola Campus</i> Drummond Auditorium, Room: DA 202 (514) 848-3327</p>	
Department Objectives	<p>The Department of Exercise Science is committed to teaching and research in the areas of exercise, health, and physical activity while emphasizing the fields of athletic therapy and clinical exercise physiology. The curriculum permits students to explore the biomechanical, physiological, and psychological responses to physical activity of healthy individuals and persons with a variety of impairments and disabilities. Lectures and laboratories are combined with supervised involvement in community and professional activities. Students are provided with an education which is compatible with obtaining employment in the health and fitness field or continuing their studies in health-related professional or graduate schools.</p>	
Programs	<p>The BSc Major and Specialization programs in Exercise Science provide students with the opportunity to acquire essential knowledge and a strong foundation in the field of exercise science. Students are exposed to a concentrated series of courses that incorporate the application of biological sciences to exercise, physical activity, and health-related areas including athletic therapy and clinical exercise physiology.</p> <p>The fundamental concepts associated with Clinical Exercise Physiology (CEP) include the adaptation of traditional exercise forms, assessment techniques, and training protocols which address the needs of individuals with a disease or functional disability (e.g. heart disease, diabetes, neurological disorders, etc.). Students entering the field of CEP acquire an appreciation of persons with a disability, their lifestyle, and their exercise possibilities. The form of exercise application ranges from adapted physical activities to competitive sports.</p> <p>The BSc Specialization in Exercise Science/Athletic Therapy is accredited by the Canadian Athletic Therapists Association (CATA) and is directed toward the preparation of students seeking to become a Certified Athletic Therapist in Canada (C.A.T.[C]). A Certified Athletic Therapist (or C.A.T.[C]) is devoted to the health care of physically active individuals. The scope of practice of the CATA includes prevention, immediate care, and reconditioning of musculoskeletal injuries. Some of the techniques used to accomplish prevention of injury are postural evaluation, conditioning, and providing prophylactic support. Immediate care and rehabilitation of musculoskeletal injury consist of injury assessment, first aid and emergency care, exercise and modality therapy, and preparing individuals for safe return to physical activity or athletic participation. Student members (certification candidates) of the CATA must fulfil the academic and practical requirements of a program accredited by the CATA in order to enter the CATA certification exam process.</p> <p>While the Major addresses the core applied-science, health, and fitness courses, the Specialization offers additional courses providing a theoretical knowledge base in athletic therapy and clinical exercise physiology. Students graduating from the BSc Specialization program possess the academic background compatible with entry requirements into programs leading to professional, vocational, and post-graduate opportunities.</p>	
	<p>Students are required to complete the appropriate profile for entry into the program (see §31.002 — Programs and Admission Requirements — Profile). Students entering the Major and Specialization programs should refer to §16.3.10 — Academic Performance, and §31.003.1 — WGPA Requirements.</p>	

All incoming Exercise Science students enter into either the BSc Major or BSc Specialization in Exercise Science. During the first year of the program, students enrolled in the BSc Specialization may apply for entry into either the BSc Specialization in Exercise Science/Clinical Exercise Physiology or the BSc Specialization in Exercise Science/Athletic Therapy. The number of students that can be accommodated in these programs each year is limited by laboratory space and the availability of internship placements. A yearly quota has been established for acceptance into the Athletic Therapy and Clinical Exercise Physiology Specializations. For these reasons, the Department of Exercise Science has adopted a distinct admission procedure for entry into these programs of study. Interested candidates may obtain information about these admission requirements by contacting the Exercise Science Admissions Committee, Department of Exercise Science, Loyola Campus, Concordia University, 7141 Sherbrooke Street West, Montréal, Québec, H4B 1R6.

*Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.*

<p>63 BSc Specialization in Exercise Science <i>Stage I</i> 21 EXCI 200³, 210³, 253³, 254³, 257³, 261³; INTE 296³ 6 CATA 262³, 263³ <i>Stage II</i> 18 EXCI 342³, 351³, 355³, 357³, 358³, 380³ 3 CATA 338³ <i>Stage III</i> 9 EXCI 422³, 445³, 451³ 6 Chosen from EXCI 423³, 452³, 455³, 458³, CATA 438³</p>	<p>66 BSc Specialization in Exercise Science/ Clinical Exercise Physiology <i>Stage I</i> 27 EXCI 200³, 210³, 253³, 254³, 257³, 261³; CATA 262³, 263³, INTE 296³ <i>Stage II</i> 21 EXCI 342³, 351³, 355³, 357³, 358³, 380³, 383³ <i>Stage III</i> 15 EXCI 422³, 423³, 445³, 451³, 483³ 3 Chosen from EXCI 455³, 458³</p>
<p>72 BSc Specialization in Exercise Science/ Athletic Therapy <i>Stage I</i> 21 EXCI 200³, 210³, 253³, 254³, 257³, 261³; INTE 296³ 6 CATA 262³, 263³ <i>Stage II</i> 15 EXCI 342³, 351³, 355³, 357³, 358³ 11 CATA 330¹, 338³, 340¹, 348³, 390³ <i>Stage III</i> 3 EXCI 445³ 3 Chosen from EXCI 451³, 452³ 13 CATA 430¹, 438³, 447³, 462³, 480³</p>	<p>42 BSc Major in Exercise Science <i>Stage I</i> 21 EXCI 200³, 253³, 254³, 257³, 261³; CATA 262³, INTE 296³ <i>Stage II</i> 15 EXCI 342³, 351³, 355³, 357³, 358³ <i>Stage III</i> 3 EXCI 445³ 3 Chosen from EXCI 421³, 452³, 455³, 458³</p>

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Courses

CATA:

CATA 262 Basic Emergency Care (3 credits)

Prerequisite: EXCI 253 previously or concurrently. This course identifies common emergency situations in the athletic environment, and provides theoretical and practical components of management skills to safely deal with these situations. Specific signs and symptoms of basic emergency conditions are discussed. Planning of events to prepare for sport-related emergencies and administration of initial emergency techniques are included. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 262 may not take this course for credit.

NOTE: Corporation Thérapeutes du Sport du Québec (CTSQ) accepts successful completion

of this course as equivalent to a first aid course which is a partial requirement towards provincial recognition as a Level I Sport First Aider.

CATA 263 Principles of Athletic Therapy (3 credits)

Prerequisite: CATA 262. The course considers topics in athletic therapy from professional, preventive, and pathological perspectives. The course deals with injury classification, clinical flexibility, strength testing, cryotherapy, and sports dermatology. Preventive techniques such as pre-season physical examinations, protective equipment, hazard recognition, and taping techniques are also addressed. Acute and chronic pathologies associated with physical activity, as well as issues including sudden death and communicable diseases in athletics, and the adolescent athlete will be discussed.

Lectures and laboratory.

NOTE: Students who have received credit for EXCI 263 or 335 may not take this course for credit.

CATA 330 Assessment and Rehabilitation Laboratory I (1 credit)

Prerequisite: CATA 263, 338 previously or concurrently, enrolment in the Exercise Science/Athletic Therapy Specialization. This is a practical laboratory course in assessment and rehabilitation with specific concentration on the extremities. The student receives hands-on exposure to tests for active and passive joint ranges of motion, muscle strength, and neurological deficits. Special tests to help identify various pathologies will be introduced. History taking and palpation skills are also presented. This laboratory course will emphasize assessment, treatment decisions, and guidelines for progression of therapy of the upper and lower extremities. Laboratory only.

NOTE: Students who have received credit for EXCI 330 or 336 may not take this course for credit.

CATA 338 Assessment and Rehabilitation I: The Extremities (3 credits)

Prerequisite: CATA 263 and acceptance into the Exercise Science Specialization. This course examines clinical assessment and rehabilitation protocols. Topics include assessment of medical status, evaluation protocols, tissue healing, and postural asymmetries. Applied anatomy, assessment, and surgical procedures of orthopaedic injuries to upper and lower extremities, and concomitant rehabilitation programs are presented. Lectures only.

NOTE: Students who have received credit for EXCI 336 or 338 may not take this course for credit.

CATA 340 Therapeutic Modalities in Sports Medicine Laboratory (1 credit)

Prerequisite: CATA 348 previously or concurrently. This is a practical laboratory course in therapeutic modalities which are used in the sports medicine clinic or athletic therapy room. After review of body physiological responses to trauma, instructions will relate to how each modality will affect the injury response process. The student will be introduced to each modality's instrumentation, learn how to set it up prior to treatment, and practice application for various pathologies. An introduction to manual therapies such as mobilization and massage will be presented. Indications, contraindications, and precautions for all treatment protocols will be given. Laboratory only.

NOTE: Students who have received credit for EXCI 340 may not take this course for credit.

CATA 348 Therapeutic Modalities in Sports Medicine (3 credits)

Prerequisite: CATA 338 and enrolment in the

Exercise Science/Athletic Therapy Specialization.

Students are introduced to the parameters of therapeutic modalities and their physiological effects. Various modalities such as heat, cold, ultrasound, muscle stimulation, interferential currents, T.E.N.S., and therapeutic massage are examined. Mobilization techniques and acupuncture principles are introduced. Indications and contraindications for all treatments are presented. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 348 or 448 may not take this course for credit.

CATA 390 Athletic Therapy Field Internship (3 credits)

Prerequisite: CATA 263 and acceptance into the Exercise Science/Athletic Therapy Specialization. This course offers students the opportunity to work in an emergency or preventive setting with a sports team, although some clinical component may be introduced. Students must be certification candidates of the Canadian Athletic Therapists Association (CATA) and the Québec Corporation of Athletic Therapists (QCAT). This course involves a commitment of 120 hours including a weekly seminar.

NOTE: Students who have received credit for EXCI 390 or for this topic under an EXCI 398 number may not take this course for credit.

CATA 430 Assessment and Rehabilitation Laboratory II (1 credit)

Prerequisite: CATA 330, 338, and 438 previously or concurrently. This is a practical laboratory course in assessment and rehabilitation with specific concentration on the spine and pelvis. Students receive hands-on exposure to tests for active and passive joint ranges of motion, muscle strength, and neurological deficits. Special tests to help identify various pathologies are introduced. History taking and palpation skills are also presented. This laboratory course emphasizes assessment, treatment decisions, and guidelines for progression of therapy of the spine and pelvis. Laboratory only.

NOTE: Students who have received credit for EXCI 339 or 430 may not take this course for credit.

CATA 438 Assessment and Rehabilitation II: Spine and Pelvis (3 credits)

Prerequisite: CATA 338. This course examines clinical assessment and rehabilitation protocols. Topics include chart recording, proprioception, open and closed kinetic chains, and gait analysis. Applied anatomy, assessment, and surgical procedures of orthopaedic injuries to the temporomandibular joint, cervical, thoracic and lumbar spine, and to the pelvis are examined. Concomitant rehabilitation programs are presented. Lectures only.

NOTE: Students who have received credit for EXCI 336 or 339 or 438 may not take this course for credit.

CATA 447 *Special Topics in Athletic Therapy* (3 credits)

Prerequisite: CATA 348. This course focuses on recent research outcomes and new issues in athletic therapy specific to prevention, assessment, and rehabilitation of athletic injuries. The course content varies within the domains of the Canadian Athletic Therapy Association depending upon the most current issues such as surgical techniques, new medications, advanced assessment and modality techniques, and issues related to professional development and the workplace environment. Information is presented from a variety of courses and disciplines to enhance the knowledge base received from core Athletic Therapy courses. Lectures only.

CATA 462 *Advanced Emergency Care* (3 credits)

Prerequisite: CATA 262 and enrolment in the Exercise Science/Athletic Therapy Specialization. This course completes the preparation of Athletic Therapy students in the area of emergency care of sports-related injury. It identifies the less common and more complicated emergency situations experienced in the athletic therapy setting. Advanced theoretical and practical components are presented. This course develops the ability of the student to care for the athlete beyond the initial stages of emergency management and towards advanced life support. Lectures and laboratory.

CATA 480 *Athletic Therapy Clinical Internship* (3 credits)

Prerequisite: CATA 348, 390; EXCI 358. Students must be certification candidates of the Canadian Athletic Therapists Association and the Québec Association of Athletic Therapists. The course offers a supervised period of work in a rehabilitation or athletic therapy clinic. The course involves a commitment of 120 hours including a weekly seminar.
NOTE: Students who have received credit for EXCI 460 or 480, or for this topic under an EXCI 499 number may not take this course for credit.

EXCI:

EXCI 200 *Introduction to Exercise Science, Physical Activity and Health* (3 credits)

Prerequisite: Enrolment in an Exercise Science program. This course introduces students to the field of exercise science as a discipline and profession. Using classic epidemiological studies, students are exposed to the role of physical activity on morbidity and mortality. Primary and secondary health-risk factors are examined relative to the influence physical activity has on them and one's quality of life. Also addressed are methods and techniques employed to develop positive attitudes and habits (lifestyle behaviours) supporting an active lifestyle, with the specific intent of increasing

exercise adherence and compliance. Lectures only.

NOTE: Students who have received credit for EXCI 201 may not take this course for credit.

EXCI 210 *Introduction to Adapted and Therapeutic Physical Activity* (3 credits)

Prerequisite: Enrolment in an Exercise Science program. This course differentiates between adapted and therapeutic approaches to physical activity with respect to their historical development, inherent principles, types of disabilities and disease conditions, demographics and epidemiological data. Lectures only.

EXCI 218 *Physical Growth and Maturation* (3 credits)

This course considers normal and abnormal growth and maturation patterns of the musculoskeletal, neural, hormonal, cardiovascular, and respiratory systems of the body. In addition, socialization and psychosocial development processes with relevance to an exercise or sports environment are examined. These patterns and processes are investigated from childhood through adolescence and adulthood. Lectures only.

NOTE: Students who have received credit for EXCI 308 may not take this course for credit. Exercise Science students may not take this course for credit.

EXCI 233 *Current Issues in Personal and Community Health* (3 credits)

This course presents an overview of factors influencing personal and community health. Students are exposed to prevalent physical and mental health issues from biological, psychological, and sociological points of view. Health-related consequences of alcohol abuse, drugs, birth control, sedentary lifestyle, eating disorders, and communicable diseases are among the topics considered. Lectures only.

NOTE: Students who have received credit for EXCI 333 may not take this course for credit. Exercise Science students may not take this course for credit.

EXCI 251 *Fundamentals of Health and Physical Activity* (3 credits)

The basic and contemporary issues of health and physical activity are discussed. General topics regarding the benefits of physical activity are examined from anatomical and physiological perspectives. Lectures only.

NOTE: Exercise Science students may not take this course for credit.

EXCI 253 *Human Anatomy I: Musculoskeletal Anatomy* (3 credits)

Prerequisite: Enrolment in an Exercise Science program. The major focus of this course covers the anatomy of the musculoskeletal system and accompanying (peripheral) circulatory and neurological systems. It also addresses introductory terminology and tissue differentiation. The

structures are examined through approaches of surface anatomy, current and traditional media and/or cadaver examination. Lectures and laboratory.

EXCI 254 *Human Anatomy II: Systemic Anatomy* (3 credits)

Prerequisite: Enrolment in an Exercise Science program. The major focus of this course covers the anatomy of the central circulatory and central respiratory systems. It also addresses the anatomy of the brain and spinal column as well as the integumentary, digestive, and urogenital systems. The structures are examined through approaches of surface anatomy, current and traditional media and cadaver examination. Lectures and laboratory.

EXCI 257 *Human Physiology I: The Neurological, Bio-energetic and Endocrine Systems* (3 credits)

Prerequisite: EXCI 254 previously or concurrently. This course surveys the functional organization and integration of the major systems of the body. A strong focus is placed on the fundamental control and operation of the nervous system, the mechanics and energetics of skeletal muscle function, and the actions of hormones comprising the endocrine and reproductive systems. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 353 may not take this course for credit.

EXCI 261 *Physical Activity Programming for Health and Performance* (3 credits)

Prerequisite: Enrolment in an Exercise Science program. This course provides students with an exposure to the principles of planning group exercise programs, and the applications of teaching techniques and skills to lead safe and effective group exercise. Several modes of activities and techniques are included, such as high and mixed aerobics, step aerobics, slide, exercise walking, "spinning", indoor cycling, jogging, interval training, circuit training, aqua fitness, muscle conditioning and flexibility. Lectures and laboratory.

EXCI 275 *The Principles, Strategies and Styles of Leadership* (3 credits)

This course examines the art of leadership and the science of management through lectures, workshops, and practical laboratory settings. Using fundamental theories, principles and concepts, this course will assist the student in the development of specific skills and strategies in acquiring an understanding of the various leadership styles. The format for this development will be accomplished using group activities, initiation tasks, simulations, and case studies. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 270 or 370 may not take this course for credit.

EXCI 298 *Selected Topics in Exercise Science* (3 credits)

EXCI 299 *Selected Topics in Exercise Science* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EXCI 342 *Physical Fitness Assessment and Exercise Intervention* (3 credits)

Prerequisite: EXCI 261; INTE 296. This course focuses on the fundamentals of fitness assessment and the design of individualized exercise programs compatible with the responsibilities of a health/fitness instructor. Topics of study include screening clients for fitness testing and physical activity participation; the selection of appropriate health fitness tests (body composition, cardiovascular endurance, musculoskeletal); assessment of test results; and the application of exercise principles in the design of safe and effective individualized exercise prescriptions for the apparently healthy client. Lectures and laboratory.

EXCI 351 *Introduction to the Biomechanics of Human Movement* (3 credits)

Prerequisite: EXCI 253; PHYS 204, 224 or equivalent. The primary focus of this course concentrates on the mechanical principles of human movement. Fundamental principles of kinematics and kinetics are examined in a theoretical and practical context. Lectures and laboratory.

EXCI 355 *Neural Control of Human Movement* (3 credits)

Prerequisite: EXCI 254, 257. Following a brief review of the nervous system anatomy and the functional properties of the neuron, students are introduced to the basic principles of the neural control of human movement, including reference to the sensory systems (visual, auditory, vestibular, proprioceptive and kinesthetic). Select pathologies and disorders of the nervous system and their resulting neuromuscular deficits are presented, as well as neuro-rehabilitative techniques and strategies. Lectures only.

EXCI 357 *Human Physiology II: The Cardiovascular and Respiratory Systems* (3 credits)

Prerequisite: EXCI 257. This course deals with the structural, the fundamental mechanisms and the functional control of the cardiovascular and respiratory systems. A detailed analysis of the rhythmical control of the heart, cardiovascular hemodynamics, capillary and coronary circulations, control of arterial blood pressure, the regulation of heart rate, cardiac output, and the peripheral vasculature is discussed. With respect to respiratory physiology, selected topics including pulmonary mechanics, principles of

gas exchange and diffusion, transport of oxygen and carbon dioxide in the blood, and the regulation of respiration are addressed. Lectures and laboratory.

EXCI 358 *Physiology of Exercise*
(3 credits)

Prerequisite: EXCI 357. This course deals with the physiological adjustments and adaptations to physical activity. Special emphasis is placed on examining the functional capacity of the cardiovascular, respiratory, neuromuscular, and endocrine systems to acute exercise and the process of adaptation to exercise training. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 456 may not take this course for credit.

EXCI 380 *Adapted Physical Activity*
(3 credits)

Prerequisite: EXCI 210 and acceptance into the Exercise Science Specialization or Exercise Science/Clinical Exercise Physiology Specialization. This course examines the pathology associated with selected physical impairments and disabilities including sensorial, neurological, and orthopaedic conditions. Appropriate adapted physical activities are presented together with contraindications to physical activity and the role of environmental factors. Students experience clinical environments through field-trip activities. Lectures only.

EXCI 383 *Clinical Exercise Physiology Internship I* (3 credits)

Prerequisite: Acceptance into the Exercise Science/Clinical Exercise Physiology Specialization. This course offers students the opportunity to observe and participate in physical activity programming offered for special populations (i.e. persons with neurological and physical impairments) under a supervised setting. This course involves a commitment of 120 hours including a weekly seminar.

EXCI 398 *Selected Topics in Exercise Science* (3 credits)

EXCI 399 *Selected Topics in Exercise Science* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EXCI 421 *Fitness and Sport Management*
(3 credits)

Prerequisite: Completion of 30 university credits. The focus of this course is on effective planning, organization, and management of fitness and sport organizations, and athletic facilities. Concepts include administrative leadership, event planning, financial management, legal aspects, public relations, fundraising and marketing techniques as well as sport licensing.

EXCI 422 *Pathophysiology, Assessment and Rehabilitation in Clinical Exercise Science I* (3 credits)

Prerequisite: EXCI 342, 358 or equivalent and enrolment in the Exercise Science/Clinical Exercise Physiology Specialization. This course reviews pathophysiology, medical intervention techniques, and medication profiles of the most common cardiovascular, respiratory, oncologic and metabolic diseases. Following an analysis of the published research outcomes, a review of the assessment techniques and rehabilitation programs is conducted in order to provide students with the required knowledge base for the design of safe and effective programming. Lectures only.

NOTE: Students who have received credit for EXCI 404 may not take this course for credit.

EXCI 423 *Pathophysiology, Assessment and Rehabilitation in Clinical Exercise Science II* (3 credits)

Prerequisite: EXCI 342, 358 or equivalent and enrolment in the Exercise Science/Clinical Exercise Physiology Specialization. This course reviews pathophysiology, medical intervention techniques, and medication profiles of the most common neuromuscular and orthopaedic diseases and disabilities. Following an analysis of the published research outcomes, a review of the assessment techniques and rehabilitation programs is conducted in order to provide students with the required knowledge base for the design of safe and effective programming. Lectures only.

EXCI 445 *Nutrition in Exercise and Sport*
(3 credits)

Prerequisite: EXCI 358. This course provides an overview of the anatomy and in-depth study of the physiology of the digestive system prior to examining the significance of carbohydrates, lipids, and proteins as essential nutritional requirements for physical activity and optimal performance. The importance of trace minerals and vitamins is also discussed. Specific issues such as the use of nutritional beverages, ergogenic aids, eating disorders, and nutritional concerns of athletes are some of the topics presented. Lectures only.

EXCI 451 *Clinical Biomechanics*
(3 credits)

Prerequisite: EXCI 351, 355 previously or concurrently. This course addresses biomechanical aspects of the most common structural and neurological abnormalities of the spine resulting in pathological gait. It also addresses the mechanics of tissue and joint injury of the head, neck, torso, and extremities. Lectures only.

EXCI 452 *Essentials of Strength Training and Conditioning* (3 credits)

Prerequisite: EXCI 358. This course utilizes the students' background knowledge of anatomy, physiology, biomechanics, exercise physiology,

and exercise programming to design pre-season, in-season, and post-season conditioning programs for elite athletes in a variety of sports. Specific issues include training methods and models, exercise selection and order, load assignments, training volumes, and frequency of participation. Lectures only.

NOTE: Students who have received credit for EXCI 498S may not take this course for credit.

EXCI 455 *Physical Activity, Health and Aging* (3 credits)

Prerequisite: EXCI 358. This course addresses the health status, physical fitness, exercise patterns, and effectiveness of exercise prescription for the well elderly and those exhibiting symptoms of chronic diseases which commonly accompany the aging process. Lectures and laboratory.

EXCI 458 *Pediatric Exercise Science* (3 credits)

Prerequisite: EXCI 351, 358. This course introduces students to the anatomical, physiological, and psychosocial issues related to exercise and physical activity in children. Topics include influence on growth and health, injury potential, endurance exercise, weight training, youth in sport, competitive and collaborative play, stress in childhood, and the strategies for improving exercise habits of children. Lectures only.

EXCI 483 *Clinical Exercise Physiology Internship II* (3 credits)

Prerequisite: EXCI 358, 383. The course offers a supervised period of work as activity leader/

exercise specialist in a hospital or rehabilitation centre as an assistant in performing physiological evaluations, designing exercise programs, and animating physical activities. The course involves a commitment of 120 hours including a weekly seminar.

NOTE: Students who have received credit for EXCI 463 or for this topic under an EXCI 499 number may not take this course for credit.

EXCI 492 *Independent Study in Exercise Science* (3 credits)

Prerequisite: Completion of 60 credits in the Exercise Science Major or Specialization Programs and written permission of the Department Chair. This course provides an opportunity to conduct a small-scale scientific research project under the supervision of a faculty member from the Department. In consultation with a faculty member, the student selects a topic, formulates a research methodology, collects data, analyses the results, and writes a formal research report.

NOTE: Students who have received credit for EXCI 491 may not take this course for credit.

EXCI 498 *Advanced Topics in Exercise Science* (3 credits)

EXCI 499 *Advanced Topics in Exercise Science* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.130 GEOGRAPHY

Faculty	Chair	MONICA MULRENNAN
	PATRICIA A. THORNTON	ALAN E. NASH
		JOHN ZACHARIAS
	Professors	Assistant Professor
	S. ROBERT AIKEN	PASCALE BIRON
	DAVID B. FROST	
	BRIAN SLACK	
	Associate Professors	Adjunct Professors
	JACQUELINE M. ANDERSON	CLAUDE COMTOIS
	I. MAX BARLOW	MICHAEL MARSDEN
	DAVID F. GREENE	ANDRÉ ROY
<hr/>		
Location	Sir George Williams Campus J.W. McConnell Building, Room: LB 641 (514) 848-2050	
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Department Objectives	Geography focuses on the Earth as the home of humans. Of central concern is the study of the physical and biological processes that operate in the natural world and the human processes that create landscapes and places. Geography explores the complexity of and the relations between cultural and natural systems, examines the ongoing radical transformation of the Earth and space by human action, and focuses on the meaning that people attach to space, place and landscape. In addition to learning a variety of technical skills (for example, cartography, statistical methods, and computer-based geographic information systems), students acquire a better understanding of the world (local, regional and global) and the place of humans in it.	
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Programs	BSc Programs Students are required to complete the appropriate entrance profile for entry into the program (see §31.002 — Programs and Admission Requirements — Profiles). Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.	
	60 BA Honours in the Human Environment	Stage II
	Stage I	12 GEOG 300 ³ , 360 ⁶ , 363 ³
	15 GEOG 220 ³ , 260 ³ , 272 ³ , 274 ³ , 290 ³	6 Chosen from GEOG 317 ³ , 318 ³ , 330 ³ , 355 ³
	3 Chosen from GEOG 210 ³ , GEOL 210 ³ , URBS 230 ³	6 Chosen from GEOG 374 ³ , 375 ³ , 376 ³ , 377 ³ , 378 ³
	Stage II	Stage III
	12 GEOG 300 ³ , 360 ⁶ , 363 ³	12 Elective credits in Geography at the 400 level
	6 Chosen from GEOG 317 ³ , 318 ³ , 330 ³ , 355 ³	6 Elective credits in Geography at the 300 or 400 level
	6 Chosen from GEOG 374 ³ , 375 ³ , 376 ³ , 377 ³ , 378 ³	
	Stage III	42 BA Major in the Human Environment
	12 Elective credits in Geography at the 400 level	Stage I
	6 GEOG 491 ⁶	15 GEOG 220 ³ , 260 ³ , 272 ³ , 274 ³ , 290 ³
		3 Chosen from GEOG 210 ³ , GEOL 210 ³ , URBS 230 ³
	60 BA Specialization in the Human Environment	Stage II
	Stage I	12 GEOG 300 ³ , 360 ⁶ , 363 ³
	15 GEOG 220 ³ , 260 ³ , 272 ³ , 274 ³ , 290 ³	3 Chosen from GEOG 317 ³ , 318 ³ , 330 ³ , 355 ³
	3 Chosen from GEOG 210 ³ , GEOL 210 ³ , URBS 230 ³	3 Chosen from GEOG 374 ³ , 375 ³ , 376 ³ , 377 ³ , 378 ³

<i>Stage III</i>		At least 6 chosen from GEOG 470 ³ , 472 ³ , 474 ³ No more than 6 chosen from BIOL 351 ³ , 353 ³ , 354 ³ , 450 ³ , 457 ³ , 458 ³ , 459 ³ ; GEOL 302 ³ , 324 ³ , 440 ³ No more than 18 chosen from GEOG 403 ³ , 406 ³ , 458 ³ , 463 ³ , 466 ³ , 473 ³ , 498 ^{3*}	
6	Elective credits in Geography at the 400 level.		
69	BSc Honours in Environmental Geography		
<i>Stage I</i>			
15	GEOG 220 ³ , 260 ³ , 272 ³ , 274 ³ , 290 ³		
3	GEOL 210 ³		
3	Chosen from BIOL 225 ³ , 226 ³ , 227 ³ ; GEOL 213 ³ ; PHYS 273 ³		
<i>Stage II</i>			
12	GEOG 300 ³ , 360 ⁶ , 363 ³		
12	Chosen from GEOG 355 ³ , 374 ³ , 375 ³ , 376 ³ , 377 ³ , 378 ³		
<i>Stage III</i>			
18	Made up from the following groups: At least 6 chosen from GEOG 470 ³ , 472 ³ , 474 ³ No more than 6 chosen from BIOL 351 ³ , 353 ³ , 354 ³ , 450 ³ , 457 ³ , 458 ³ , 459 ³ ; GEOL 302 ³ , 324 ³ , 440 ³ No more than 12 chosen from GEOG 403 ³ , 406 ³ , 458 ³ , 463 ³ , 466 ³ , 473 ³ , 498 ^{3*}		
6	GEOG 491 ⁶		
<i>*Where the subject matter is of a natural science nature.</i>			
<i>NOTE: 48 credits in the program must be approved science credits.</i>			
69	BSc Specialization in Environmental Geography		
<i>Stage I</i>			
15	GEOG 220 ³ , 260 ³ , 272 ³ , 274 ³ , 290 ³		
3	GEOL 210 ³		
3	Chosen from BIOL 225 ³ , 226 ³ , 227 ³ ; GEOL 213 ³ ; PHYS 273 ³		
<i>Stage II</i>			
12	GEOG 300 ³ , 360 ⁶ , 363 ³		
12	Chosen from GEOG 355 ³ , 374 ³ , 375 ³ , 376 ³ , 377 ³ , 378 ³		
<i>Stage III</i>			
24	Made up from the following groups:		
45	BSc Major in Environmental Geography		
<i>Stage I</i>			
15	GEOG 220 ³ , 260 ³ , 272 ³ , 274 ³ , 290 ³		
3	GEOL 210 ³		
3	Chosen from BIOL 225 ³ , 226 ³ , 227 ³ ; GEOL 213 ³ ; PHYS 273 ³		
<i>Stages II & III</i>			
12	GEOG 300 ³ , 360 ⁶ , 363 ³		
12	300- or 400-level Geography elective credits chosen with the approval of the Geography adviser. At least three credits must be at the 400 level.		
30	Minor in the Human Environment		
15	GEOG 220 ³ , 260 ³ , 272 ³ , 274 ³ , 290 ³		
3	GEOG 300 ³		
12	GEOG elective credits at the 300 or 400 level		
<i>NOTE: This Minor is intended for Arts students.</i>			
24	Minor in Environmental Geography		
6	GEOG 272 ³ , 274 ³		
3	GEOL 210 ³		
9	Chosen from GEOG 300 ³ , 363 ³ , 374 ³ , 375 ³ , 376 ³ , 377 ³ , 378 ³		
6	Chosen from GEOG 406 ³ , 458 ³ , 463 ³ , 470 ³ , 472 ³ , 474 ³		
<i>NOTE: This Minor is intended for Science students.</i>			

Students in programs leading to the BSc degree may take the courses in Geography listed below for credits to be applied to their program of concentration.

GEOG 260	Mapping and the Environment (3 credits)
GEOG 272	The Natural Environment: Air and Water (3 credits)
GEOG 274	The Natural Environment: Land and Life (3 credits)
GEOG 360	Research Methods (6 credits)
GEOG 363	Geographic Information Systems (3 credits)
GEOG 374	Plant Ecology (3 credits)
GEOG 375	Hydrology (3 credits)
GEOG 376	Biogeography (3 credits)
GEOG 377	Landform Evolution (3 credits)
GEOG 378	The Climate System (3 credits)
GEOG 458	Environmental Impact Assessment (3 credits)
GEOG 463	Advanced Geographic Information Systems (3 credits)
GEOG 466	Cartographic Visualization (3 credits)
GEOG 470	Environmental Management (3 credits)
GEOG 472	Environmental Change during the Quaternary (3 credits)
GEOG 473	Environment and Health (3 credits)
GEOG 474	Forest Management (3 credits)

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

GEOG 200 World Geography (3 credits)

This course provides an overview of world geography. It first examines the main environmental and social factors that geographers have employed to divide the world into a series of distinctive regions, and uses examples of specific countries to explore the distinctive geographical processes by which these patterns are transformed and perpetuated.

NOTE: Students who have completed courses numbered GEOG 209 and above may not take GEOG 200-208 for credit.

GEOG 203 (also listed as SCHA 203) Canadian Environmental Issues (3 credits)

This course explores a number of contemporary and controversial environmental issues in Canada. It provides a general overview of the policy context of environmental decision-making, focusing in particular on the involvement of aboriginal groups in natural resource management and the role of various levels of government, non-government organizations, the news media and the international community in shaping Canadian environmental policies. Issues explored in the course include national parks, animal rights, fisheries management, and northern development and environmental impact assessment.

NOTE: Students who have received credit for SCHA 203, 254, or for this topic under a GEOG 298 number may not take this course for credit.

NOTE: Students who have completed courses numbered GEOG 209 and above may not take GEOG 200-208 for credit.

GEOG 204 (also listed as SCHA 204) Global Environmental Issues (3 credits)

This course examines a number of global environmental issues from an interdisciplinary perspective. The complex interactions and interdependencies among the biophysical, socio-economic, political, and cultural aspects of global environmental change are explored in relation to issues such as global warming, desertification, deforestation, declining biodiversity, and acid rain.

NOTE: Students who have received credit for SCHA 204, 253, or for this topic under a GEOG 298 number may not take this course for credit.

NOTE: Students who have completed courses numbered GEOG 209 and above may not take GEOG 200-208 for credit.

GEOG 206 Maps and Mapping (3 credits)

This course explores the role of maps in society. Students are introduced to basic mapping concepts in order to evaluate the meaning and use of various types of maps. Samples of the

following types of maps are studied: historic maps, political maps, cognitive maps, maps in newspapers and magazines, computer-generated maps, and maps on television.

NOTE: Students who have completed courses numbered GEOG 209 and above may not take GEOG 200-208 for credit.

GEOG 209 The Geography of a Selected Region (3 credits)

The course includes both a systematic survey as well as an in-depth focus on particular geographical issues and problems. The specific region to be studied may vary from year to year.

GEOG 210 Geography of Global Change (3 credits)

This course examines a variety of geographical changes related to globalization. It focuses mainly on the global political system and the global economy, and also considers transport and communications systems, culture, and environmental issues.

NOTE: Students who have received credit for GEOG 201 or 300 may not take this course for credit.

GEOG 220 The Human Environment: Place, Space, and Identity (3 credits)

This course introduces the concepts of "place", "space", and "identity". These concepts were developed by geographers to investigate economic, social, and especially cultural factors which influence the ways we construct and understand our environments. It examines how we construct the meaning of place, the unique identity of places, the contests over identity of place, and claims to rights over place. How these have been affected by migration and globalization are then examined within the context of an already constituted social and geographical unevenness (political, economic, environmental, and cultural).

NOTE: Students who have received credit for GEOG 211 may not take this course for credit.

GEOG 260 Mapping the Environment (3 credits)

This course introduces students to the basic concepts, theory, and methods of mapping with reference to topographic and thematic maps. Through lectures, laboratories, and practical assignments, students learn about the sources of data for maps, and how these data are manipulated, represented, and interpreted in both analogue and digital form (Geographic Information Systems).

NOTE: Students who have received credit for GEOG 267 may not take this course for credit.

GEOG 272 *The Natural Environment: Air and Water* (3 credits)

This course introduces the Earth's atmosphere and hydrosphere through an examination of their structural components, processes, and variability through space and time. Topics include the global energy system, air temperature cycles, weather systems, urban climate, the water cycle, oceans, lakes, and rivers.

NOTE: Students who have received credit for GEOG 270, 271, or 275 may not take this course for credit.

GEOG 274 *The Natural Environment: Land and Life* (3 credits)

This course introduces the Earth's lithosphere and biosphere through an examination of their structural components, processes, and variability through space and time. Topics include the tectonic system, volcanic activity, landscape and landform development, soils, biogeochemical cycling, succession, and biomes.

NOTE: Students who have received credit for GEOG 270, 271, or 276 may not take this course for credit.

GEOG 290 *The Geographer's World: An Integrated Approach to Land, People, and Society* (3 credits)

Prerequisite: GEOG 220, 272; 274 concurrently.

This course integrates human and physical geography into a holistic view of human-environment relations. It focuses on a few key environmental issues through case studies operating at a variety of scales (global, national, regional, local), and in different places and time periods. It examines how humans interact with the environment; how they, as members of societies and bearers of culture, perceive, use, transform, and manage the physical environment in different ways and are in turn impacted by changes to that environment. Each case study highlights a specific method and tool of geographic analysis and introduces students to the value of different approaches to environmental issues.

NOTE: Students who have received credit for GEOG 211, 271, 275, or 276 may not take this course for credit.

GEOG 298 *Selected Topics in Geography* (3 credits)

GEOG 299 *Selected Topics in Geography* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and the Geography Course Guide.

GEOG 300 *Environment: Historical and Cultural Perspectives* (3 credits)

Prerequisite: GEOG 290 or permission of the Department. This course explores selected aspects of nature and culture in Western thought. It focuses on four overlapping themes: (1) it

presents a broad historical overview of the questions that humans have posed concerning the habitable earth and their relationships to it; (2) it looks in more detail at one of those questions, namely, the extent to which human agency has transformed the earth; (3) it explores the relations between attitudes, values and behaviour, focusing mainly on the idea of wilderness; and (4) it traces the roots and describes the main characteristics of contemporary environmentalism.

NOTE: Students who have received credit for GEOG 303, 304, or 305 may not take this course for credit.

GEOG 317 *Population Geography* (3 credits)

Prerequisite: GEOG 220 or permission of the Department. This course offers a broad introduction to the characteristics and processes of population change. It focuses on techniques of population analysis and is primarily concerned with issues and problems at the national and global scale. It is framed within the theoretical context of the demographic and mobility transitions. The content reflects the growing focus on policy formation and exposes students to widely available tools (software) for "hands-on" and up-to-date analysis of real demographic situations and scenarios.

GEOG 318 *Vanishing Borders: Regions and the New International Order* (3 credits)

Prerequisite: GEOG 220, completion of 30 credits for students enrolled in a Social Science program, or permission of the Department. This course examines the argument that as globalization reduces and removes the effects of international boundaries, regions are becoming more important in the global economy and in the global political system. Emerging new forms of regionalism are discussed, such as transborder regions, regions based on transnational economic integration, and hi-tech regions. The changing nature of more traditional regions, such as metropolitan regions and regions based on sub-state nationalism is also considered.

GEOG 330 *Urban Geography* (3 credits)

Prerequisite: GEOG 220 or permission of the Department. The geographer's view of the city is explored at two scales: cities as elements of an urban system, including topics such as urbanization and the functional structure of cities; and intra-urban patterns, including the spatial arrangement of land-use and social areas.

NOTE: Students who have received credit for GEOG 331 may not take this course for credit.

GEOG 333 *Urban Transportation* (3 credits)

Prerequisite: URBS 230 or permission of the Department. This course examines the function of various transport modes in the city. Both practical and policy issues are covered. Methods of transportation planning are presented through

practical assignments based on fieldwork in Montréal. Policy options are considered in light of theoretical and empirical evidence drawn from geographical research.

GEOG 342 *The Making of the Irish Landscape* (3 credits)

Prerequisite: Second-year standing or permission of the Department. This course focuses on the evolution of the Irish landscape and examines the physical, political, social, economic and attitudinal processes that have shaped the cultural landscape from prehistoric times to the present.

NOTE: Students who have received credit for this topic under a GEOG 398 number may not take this course for credit.

GEOG 355 *Resource Analysis and Management* (3 credits)

Prerequisite: GEOG 290 or permission of the Department. The course is concerned with the use of the Earth's natural resources and with the economic, institutional, and ecological factors that affect, condition, and control the use of these resources. It examines various approaches to analysing, evaluating, and resolving resource issues and conflicts. These approaches are applied to Canadian forestry, fisheries, water, energy, and mineral resources.

GEOG 360 *Research Methods* (6 credits)

Prerequisite: GEOG 260, 290; or permission of the Department. This two-semester course focuses on research design, research methods, and quantitative data gathering and analysis. There is an emphasis on field techniques (three weekends in the field). The resulting data sets form the material for the introduction of statistical analyses (t-tests, regression, ANOVA, and non-parametric tests) and the writing of research papers and critical reviews.

NOTE: Students who have received credit for GEOG 361 or 362 may not take this course for credit.

GEOG 363 *Geographic Information Systems* (3 credits)

Prerequisite: GEOG 260, 290; or permission of the Department. This course is an introduction to the nature, role, and value of Geographic Information Systems (GIS). Through lectures and practical assignments students examine the data requirements (sources and structure) and hardware and software requirements of GIS as well as ways of using GIS for spatial analysis and modelling. Concepts are applied in the laboratory using IDRISI.

NOTE: Students who have received credit for this topic under a GEOG 398 number may not take this course for credit.

GEOG 374 *Plant Ecology* (3 credits)

Prerequisite: GEOG 272, 274; or permission of the Department. This course examines plant community dynamics as a consequence of the population dynamics of the constituent plant

species. The role of natural disturbances is stressed, particularly as it relates to forests. Concepts are applied to problems in park management, vegetation mapping, and present controversies about the maintenance of species diversity.

GEOG 375 *Hydrology* (3 credits)

Prerequisite: GEOG 272, 274; or permission of the Department. The course introduces students to water as an agent of transformation of the landscape. It is based on the use of fundamental concepts from the analysis of systems and from process studies. The course aims at understanding the mechanics of processes governing the motion of water on hillslopes and in rivers.

Theoretical concepts are presented in a lecture format, while the analysis of hydrological data through practical assignment provides an appreciation of the real-world manifestation of these concepts.

NOTE: Students who have received credit for GEOG 475 or 476 may not take this course for credit.

GEOG 376 *Biogeography* (3 credits)

Prerequisite: GEOG 272, 274; or permission of the Department. This course examines the spatial distribution of animals and plants at large scales and over long periods. Topics include vegetation distribution in relation to climate, island biogeography, long-distance dispersal, diversity gradients, mass extinctions, speciation, and taxonomic distribution in relation to plate drifting. This course involves field trips.

NOTE: Students who have received credit for GEOG 371 may not take this course for credit.

GEOG 377 *Landform Evolution* (3 credits)

Prerequisite: GEOG 272, 274; or permission of the Department. This course examines the processes responsible for the development and evolution of the Earth's landforms, including human modifications to those landforms. Topics include the study of fluvial, coastal, glacial, periglacial, and arid landforms. Lectures and laboratory.

NOTE: Students who have received credit for GEOG 372 may not take this course for credit.

NOTE: Students are strongly encouraged to take GEOL 210.

GEOG 378 *The Climate System* (3 credits)

Prerequisite: GEOG 272, 274; or permission of the Department. This course compares the climate systems of the tropics and the mid-latitudes; examines the differing climate systems over oceans, deserts, grasslands, forests, and frozen surfaces; and explores the acquisition of climate data from traditional instruments, automated weather stations, and the Internet. It concludes with a brief discussion of climate modelling. Students are responsible for taking observations at the Department's weather station.

NOTE: Students who have received credit for GEOG 373 may not take this course for credit.

GEOG 398 *Selected Topics in Geography*
(3 credits)

GEOG 399 *Selected Topics in Geography*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and Geography Course Guide.

GEOG 403 *Sustainable Development*
(3 credits)

Prerequisite: GEOG 300 or permission of the Department. This course deals with selected aspects of the relations between humans and the environment in the contemporary world. It focuses specifically on the concept of sustainable development and deals mainly with problems and issues at the global scale.

NOTE: Students who have received credit for GEOG 405 may not take this course for credit.

GEOG 406 *The Tropical Rain Forest*
(3 credits)

Prerequisite: GEOG 300 or permission of the Department. This course focuses on three themes: how tropical forest ecosystems function and change; the causes and consequences of deforestation and forest alteration; and forest values and the need for conservation.

NOTE: Students who have received credit for GEOG 306 or for this topic under a GEOG 398 or 498 number may not take this course for credit.

GEOG 407 *Indigenous Resource Management* (3 credits)

Prerequisite: GEOG 300 or permission of the Department. This course explores the relationship between indigenous peoples and the environment. It focuses on two primary themes: first, it looks at ways in which ecological knowledge shapes indigenous resource management, land tenure, and sea-rights systems; and second, it examines the roles of indigenous peoples and state authorities in land, sea, and resource management.

NOTE: Students who have received credit for GEOG 304 or for this topic under a GEOG 498 number may not take this course for credit.

GEOG 417 *Population and the Environment* (3 credits)

Prerequisite: GEOG 317 or permission of the Department. This course examines the processes by which population and environmental phenomena interact, and looks at the effects of those processes through a series of case studies and thematic issues. It concludes with a discussion of theoretical approaches to the relationship between populations, resources and environment, as well as theory currently advanced by policy makers to inform response to population-environment problems.

GEOG 430 *Cities and Their Governance*
(3 credits)

Prerequisite: 60 credits or permission of the Department. The course examines government structures and administrative arrangement in large cities and focuses on developments occurring over the last fifty years, with an emphasis on the effects and implications of recent restructuring of local government. Current major challenges for urban local government are considered, relating to the role of local government in economic development and in working towards sustainable cities. The perspective is primarily geographical, but the course is intended to interest students in several social sciences.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 438 *Urban Ecology* (3 credits)

Prerequisite: GEOG 330 or permission of the Department. The city is viewed as an interdependent and interactive system. The issues surrounding ecological, economic, and socio-cultural sustainability are examined in the context of the development of public policy. The integration of a spectrum of ecological approaches and standards is a major theme in individual research projects undertaken in this course.

NOTE: Students who have received credit for URBS 438 or 488 may not take this course for credit.

GEOG 440 *Geography and Public Policy*
(3 credits)

Prerequisite: 33 credits in Geography or permission of the Department. This course examines the relationship between geographical approaches to problems and issues, and the public policy process. It discusses such topics as the relevance of geographical information and geographical research to policy makers, the need for assessment of the spatial and environmental impact of public policies, and the role of geographers in the public policy process.

GEOG 458 *Environmental Impact Assessment* (3 credits)

Prerequisite: GEOG 355 or permission of the Department. This course examines the conceptual bases, procedures, and methodology of Environmental Impact Assessment (EIA). The effectiveness of EIA as a decision-making process in the promotion of good environmental planning is analysed, including its role in assessing the potential effects of certain activities on the natural environment as well as on social, cultural, and economic aspects of the environment.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 463 *Advanced Geographic Information Systems* (3 credits)

Prerequisite: GEOG 360, 363; or permission of

the Department. This course in Geographic Information Systems (GIS) focuses on database structure and management as well as advanced spatial analysis techniques. It considers both practical and theoretical questions of interpretation of GIS in the context of particular problems and real data sets. The course involves hands-on use of both raster- and vector-based software in a laboratory setting.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 466 Cartographic Visualization
(3 credits)

Prerequisite: GEOG 260, 363; or permission of the Department. This course explores the map as a means of spatial representation from the perspective of visual thinking and visual communication. In an examination of theoretical issues concerning how maps work, an emphasis is placed upon the nature and importance of map symbolization and design. The practical application of these theoretical concepts is provided through the design and production of computer-assisted maps, which constitute an integral part of the course. Lectures and laboratory.

NOTE: Students who have received credit for GEOG 366 may not take this course for credit.

GEOG 470 Environmental Management
(3 credits)

Prerequisite: GEOG 377 or permission of the Department. This course applies fundamental principles concerning the biophysical environment to the development of strategies and policies for managing the environment. It takes a case-study approach to the management of coastal and fluvial environments. Topics covered include strategies and policies involved in sea defence, beach protection, integrated coastal zone management, flood alleviation, river stabilization, and river restoration schemes.

GEOG 472 Environmental Change during the Quaternary (3 credits)

Prerequisite: Six credits of physical geography at the 300 level or permission of the Department. This course examines environmental change over the last three million years to show how the biophysical environment and the landscape of the Earth have changed during the time that humans have lived on the planet. Theories covered include climate and sea-level changes as well as changes in vegetation associations, sea-ice cover, and numbers of mammals. Particular attention is paid to the degree and frequency of change and techniques of assessing environmental change.

NOTE: Students who have received credit for GEOG 372 or this topic under a GEOG 498 number may not take this course for credit.

GEOG 473 Environment and Health
(3 credits)

Prerequisite: GEOG 317, 378; or permission of the Department. This course combines aspects of applied climatology and medical geography to examine the association of climate and other environmental factors with disease or morbidity. It also highlights techniques and problems of measuring and evaluating areal associations among phenomena.

GEOG 474 Forest Management (3 credits)

Prerequisite: GEOG 374 or permission of the Department. This course looks at changes in the exploitation and management of the forest resource in Canada. Topics include the history of cutting strategies and their effect on species composition; the effects of technological changes in harvesting, transportation and milling on forests; and the evolution of modern forest management philosophies and approaches.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 490 Internship in Geography
(3 credits)

Prerequisite: Permission of the Department. This course provides final-year students the opportunity to apply their geographical skills and training in a workplace environment. In consultation with the supervisor, students identify a placement related to their interests, develop and carry out a project approved by both employer and academic supervisor, and/or keep a daily log of how the tasks and duties performed relate to and build upon their academic studies. The internship involves 120 hours of unpaid work and contribution to a seminar series.

**GEOG 491 (also listed as URBS 491)
Honours Essay** (6 credits)

Prerequisite: Permission of the Department. The course requires the student to propose and conduct a research project and to produce a substantial report under the supervision of a faculty adviser.

GEOG 498 Advanced Topics in Geography (3 credits)

GEOG 499 Advanced Topics in Geography (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and Geography Course Guide.

31.140 GEOLOGY

Faculty	Associate Professor JUDITH PATTERSON	Adjunct Assistant Professor KAREN ST. SEYMOUR
	Adjunct Professors JOHN T. JENKINS STEPHEN KUMARAPALI KALYAN K. MUKHERJI	
Location	Loyola Campus Drummond Science, Room: DS 206	Sir George Williams Campus J.W. McConnell Building, Room: LB 641 (514) 848-2050
Department Objectives	Geology is about the Earth and how natural processes change and shape the environment. It acknowledges the influence of industrial and human activity on this planet.	
Programs	<p>Currently admissions have been suspended into the BSc Major and Minor in Geology, but a variety of courses in Geology are nevertheless offered. Those numbered between 200 and 209 are designed as service courses for non-science students. Those numbered 210 and higher are designed as complementary courses for students in other Science programs.</p> <div> <div> 39 BSc Major in Geology* <i>Stage I</i> 18 GEOL 210³, 211³, 213³, 216³, 231³, 302³ <i>Stages II & III</i> 15 GEOL 311⁶, 331³, 332³, 415³ 6 Chosen from GEOL 232³ and Geology 300- and 400-level courses </div> <div> 24 Minor in Geology* 12 GEOL 210³, 211³, 213³, 302³ 12 GEOL elective credits NOTE: GEOL 203³, 205³, 206³, 208³ cover topics of general interest in Earth sciences and may be taken by students without a strong background in science. </div> </div> <p>*Admission suspended for 2001-02.</p> <p>Students without cégep Geology 901 or equivalent are required to take GEOL 210³.</p> <p>Field Trips Field trips, normally conducted on Fridays or weekends, are mandatory in some Geology courses.</p>	
Courses	<p><i>Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.</i></p> <div> <div> GEOL 203 Introduction to Environmental Geology (3 credits) Prerequisite: None; GEOL 210 recommended. Geology in the ecosystem. The Earth's atmosphere, hydrosphere, lithosphere, and biosphere in geologic time. Long-range geological effects of ecosystem pollution. Trace nutrients and health, with emphasis on the geology of trace-elements and their cause and effect on biological systems. Understanding of, control for, and prevention of natural hazards. Changes in the Earth's climate. Role of geology in land use. Lectures only. NOTE: Students in degree programs in Geology may not take this course for Geology credits. </div> <div> GEOL 205 Non-Renewable Resources (3 credits) Prerequisite: None; GEOL 210 recommended. Rocks and ore minerals. Present and future availability of Earth resources. The nature, clas- </div> <div> sification, and mode of occurrence of mineral deposits. Exploration, development, and rational exploitation of mineral resources. Elements of mining economics. Distribution of oil, gas, coal, and base-metal deposits. Evaluation of the effects of mining operations on the environment. Lectures only. NOTE: Students in degree programs in Geology may not take this course for Geology credits. </div> <div> GEOL 206 Earthquakes, Drifting Continents and Volcanoes (3 credits) The aim of the course is to provide an up-to-date account of our present knowledge of earthquakes and volcanoes and their global connections which are of general interest for students with little or no previous background in Earth sciences. Areas of concentration are: nature, distribution, and causes of earthquakes </div> </div>	

and volcanic eruptions, earthquake waves and their effects, measuring earthquakes, great earthquakes and volcanic eruptions in world history, products of volcanic eruptions, four billion years of volcanism on the Earth and elsewhere in the solar system. Prediction of earthquakes and volcanic eruptions and global connections between earthquakes, drifting continents, and volcanoes. Lectures only.

NOTE: Students in degree programs in Geology may not take this course for Geology credits.

GEOL 208 *The Earth, Moon and the Planets* (3 credits)

The course emphasizes the cosmic perspective of the Earth and focuses attention on how the results of the last two decades of planetary exploration have brought about an intellectual revolution concerning the planets, especially their surface features, processes, and histories. Lectures only.

NOTE: Students in degree programs in Geology may not take this course for Geology credits.

GEOL 210 *Introduction to the Earth* (3 credits)

This course provides an overview of the physical processes that govern how the Earth works. Topics include origin of the solar system and Earth; analysis of the internal structure of the Earth; minerals and rocks; igneous and metamorphic processes; deformation of the crust; surficial processes, including weathering, deposition and glaciation. The course culminates with the integration of these geological processes in the theory of plate tectonics, and goes on to examine the interactions of crust, mantle, atmosphere, and biosphere from this perspective. Laboratory work includes the identification of rocks and minerals, map exercises, and a field trip. Lectures and laboratory.

GEOL 211 *Mineralogy I* (3 credits)

Physical and chemical properties of minerals. Crystallography, crystal notation, stereographic projection. Crystal structures. Identification, description, and classification of minerals. One or two field trips near Montréal. Lectures and laboratory.

GEOL 213 *Structural Geology* (3 credits)

Prerequisite: GEOL 210. The course is an introduction to primary and deformational structures in rocks. Emphasis is placed on recognition, classification and nomenclature of structures on maps and in the field. Laboratory exercises emphasize map reading and interpretation, structural analysis, descriptive geometry, and stereographic projections. Lectures and laboratory.

GEOL 216 *Field Methods* (3 credits)

Prerequisite: GEOL 213; GEOL 231. Elements of surveying, construction of base maps. Geological field methods: description and recording of geological field data, construction of geological maps. Collection and presentation of field data

in exploration geophysics and exploration geochemistry. One lecture per week in the Winter Session and two-week field school in the Spring, immediately after the final examinations.

GEOL 231 *Physics of the Earth* (3 credits)

Prerequisite: Cégep Mathematics 103 or MATH 203; cégep Mathematics 203 or MATH 205; cégep Physics 301 or PHYS 206 and 226; GEOL 210 or equivalent. This course is directed towards the general understanding of physical phenomena of the solid Earth. Subjects for consideration include the following: Earth's origin, age, radioactivity, magnetism, gravity field, seismology, heat flow, structure and physical state of the Earth's interior. Lectures and laboratory.

NOTE: Students who have received credit for GEOL 221 may not take this course for credit.

GEOL 232 *Introduction to Geochemistry* (3 credits)

Prerequisite: Cégep Chemistry 201 or CHEM 206; cégep Physics 301 or PHYS 206 and 226; cégep Mathematics 103 or MATH 203; cégep Mathematics 203 or MATH 205; GEOL 210. The course focuses on the application of concepts of elementary chemistry to geological problems. Subjects for consideration include: application of thermodynamics to geological problems, phase equilibria relationships in petrogenesis, partitioning of elements, crystal chemistry, distribution of elements, chemistry of natural waters including properties of water at high temperatures and pressures. Lectures and laboratory.

NOTE: Students who have received credit for GEOL 223 may not take this course for credit.

GEOL 233 *Introductory Hydrogeology* (3 credits)

Prerequisite: GEOL 210; CHEM 206; MATH 205. This course is an introduction to the physical and geochemical aspects of hydrogeology, with emphasis on groundwater in its physical and geochemical aspects, influence on geotechnical engineering, and contamination. Lectures and laboratory.

NOTE: Students who have received credit for this topic under a GEOL 298 or 398 number may not take this course for credit.

GEOL 298 *Selected Topics in Geology* (3 credits)

GEOL 299 *Selected Topics in Geology* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GEOL 302 *Palaeobiology* (3 credits)

Prerequisite: GEOL 210. General discussion covers taphonomy, processes and patterns of evolution, extinction, ontogeny, palaeoecology and taxonomy. Systematics, morphology, biostratigraphic value of selected macro-invertebrate fossils will be included in the latter

half of the course. Lectures and laboratory.
NOTE: Students who have received credit for GEOL 212 may not take this course for credit.

GEOL 311 *Introductory Petrology*
(6 credits)

Prerequisite: GEOL 211. The identification and description of hand specimens of igneous, sedimentary, and metamorphic rocks. Rock associations. Classification and origin of major rock groups. Lectures and laboratory.

GEOL 313 *Optical Crystallography*
(3 credits)

Prerequisite: GEOL 211. Behaviour of light in crystals. The optical indicatrix. The polarizing microscope and optical properties of minerals. Identification of non-opaque minerals in oil immersion and thin sections. If time permits, use of the Universal Stage will be introduced. Lectures and laboratory.

GEOL 314 *Stratigraphy* (3 credits)

Prerequisite: GEOL 302; GEOL 311 previously or concurrently. Introduction to historical developments of stratigraphic concepts. Role of natural dynamic processes in the evolution of stratigraphic record. Discussion on stratigraphic classification and nomenclature. Major classification of tectonic elements in sedimentary basins, and broad patterns in the distribution of sedimentary rocks in relation to tectonic framework. Detailed analysis of stratigraphic principles, such as correlation (lithostratigraphic, biostratigraphic, chronostratigraphic), facies (lithofacies, biofacies), unconformities, and cyclothems. Critical evaluation of stratigraphic sequences using modern and ancient examples for the recognition of aeolian, alluvial fan, fluvial, lacustrine tidal flats, barrier coastlines, carbonate shoreline, shallow marine and submarine environments. Lectures and laboratory.

GEOL 316 *Field Geology* (3 credits)

Prerequisite: GEOL 216; GEOL 311 or permission of the Department. Two-week fieldwork right after the final examination period. Working in groups, students map an area, prepare sections, and submit a geological map and/or written report. Group studies of important outcrops or outcrop areas and quarries. Transportation is provided by the Department but students must pay for board and lodging.
NOTE: Students taking this course in their final year may not be able to graduate in the spring of the same year.

GEOL 318 *Structural Geology II* (3 credits)

Prerequisite: GEOL 213. Concepts of strain and mechanics of deformation. Description of tectonic fabrics and analysis of folds; identification and interpretation of polyphase deformation. Regional structural associations and their evaluation. Laboratory includes field-oriented structural problems, drill holes, and regional structural analysis. Use of aerial photographs in the preparation of geological maps and sections.

Several field trips and structural mapping of selected outcrops or outcrop areas. Lectures and laboratory.

GEOL 324 *Remote Sensing and Terrain Analysis* (3 credits)

Prerequisite: GEOL 210 or GEOG 272 and 274; GEOL 213 recommended. An introduction to a variety of Earth sensing techniques including aerial photography, airborne magnetometer surveys, aerial thermography, side-looking aerial radar, and multispectral scanning from satellites. Emphasis is placed on geological and geographical applications of terrain analysis. LANDSAT imagery, airphoto, stereo pairs, and aero-magnetic maps are used in the laboratory for the analysis of a number of selected areas. Lectures and laboratory.

NOTE: Students who have received credit for GEOL 215 or 224 may not take this course for credit.

GEOL 325 *Geostatistics and Computer Applications in Geology*
(3 credits)

Prerequisite: GEOL 210; INTE 290 or COMP 201 or permission of the Department. This is an introductory course in the application of statistical methods to geological problems. Topics covered include sampling from geological populations, binomial, Poisson, normal and lognormal distribution; sampling distribution and applications; analysis of variance: simple linear regression, introduction to multivariate data analysis techniques; multiple regression, factor analysis, cluster analysis, and discriminant analysis. Lectures and laboratory.
NOTE See §200.7

GEOL 331 *Historical Geology* (3 credits)

Prerequisite: GEOL 302; GEOL 213; or permission of the Department. Fundamental concepts in historical geology; principles of stratigraphy, paleo-geography, and geochronology. A systematic review of the geological history of the Earth and development of life forms from the Precambrian to Recent. Geological evolution of classical areas with special attention to the North American continent. Studies of stratigraphic sections and geological maps. Lectures and laboratory.
NOTE: Students who have received credit for GEOL 310 may not take this course for credit.

GEOL 332 *Economic Geology* (3 credits)

Prerequisite: GEOL 311 previously or concurrently. The course deals with the genetic concepts leading to the formation of metallic and non-metallic mineral deposits, their classification, world distribution, and economic evaluation. Concepts related to zonation, metallogenic provinces, metallotects, and exploration and evaluation of mineral deposits are also dealt with. Laboratory includes examination and study of selected ore-suites from the most important mining camps, ore reserve calculations, core logging and economic feasibility studies of clas-

sical mineral deposits. Lectures and laboratory.
NOTE: Students who have received credit for GEOL 317 may not take this course for credit.

GEOL 398 *Selected Topics in Geology*
(3 credits)

GEOL 399 *Selected Topics in Geology*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GEOL 411 *Igneous and Metamorphic Petrology* (6 credits)

Prerequisite: GEOL 311; GEOL 313. Interpretation of phase diagrams. Mineralogy, fabric, and petrogenesis of igneous and metamorphic rocks. Magmatic and metamorphic processes. ACF and AKF diagrams for various metamorphic facies. Study of selected problems. Lectures and laboratory.

NOTE: Students who have received credit for GEOL 390 may claim only three credits for this course.

GEOL 413 *Sedimentary Petrology*
(3 credits)

Prerequisite: GEOL 311; GEOL 313. General principles of sediment diagenesis, followed by detailed analysis of the diagenetic evolution of sandstone, shale, and carbonate rocks. Emphasis is placed heavily on the microscopic criteria in the recognition of diagenetic fabric. Problems of primary sedimentary structures and their hydro-dynamic interpretation are also discussed. Specialized topics on current development in sedimentary lithogenesis are also included. Lectures and laboratory.

GEOL 414 *Undergraduate Research*
(6 credits)

Prerequisite: For third-year Honours students. Honours students in their final year are expected to show competence in isolating and examining a geological problem under the supervision of a faculty adviser. A written application to take the course, including a brief outline of the research project, must be made to the Department before April 15 of the second year. The application is reviewed by a committee and a decision forwarded by mail. The results of research must be presented in the form of an undergraduate thesis, two copies of which must be submitted by April 1.

NOTE: Written requests from Specialization students, with appropriate academic records, to take the course will be considered.

GEOL 415 *Plate Tectonics and Crustal Evolution* (3 credits)

Prerequisite: GEOL 213; GEOL 231; GEOL 311. Techniques of data collection in tectonics. Structure and rheology of the upper mantle. Tectonics of crustal types to include shields, platforms, passive continental margins, Phanerozoic foldbelts, continental rifts, island-arc trench belts and oceanic rises, sea-floor spreading, plate tectonics, magma

associations, and plate reconstructions. Crustal origin and growth. Lectures and laboratory.
NOTE: Students who have received credit for GEOL 315 may not take this course for credit.

GEOL 417 *Mineral Deposits* (3 credits)

Prerequisite: GEOL 332; GEOL 411 previously or concurrently. The course deals with the study of ore deposits generated by magmatic segregation, contact metasomatic, hydrothermal, volcanogenic, sedimentary and supergene enrichment processes. Concepts of geothermometry, geobarometry, and stable isotopes are also dealt with. Examples of particular geological interest from the most representative mining districts of the world. Laboratory includes petrological examination of metallic suites, fluid inclusion, and Vickers microhardness tests. Lectures and laboratory.
NOTE: Students who have received credit for GEOL 416 may not take this course for credit.

GEOL 422 *Exploration Geophysics*
(3 credits)

Prerequisite: GEOL 231 or permission of the Department. A brief study of the principles of magnetic, gravimetric, electric, and seismic methods of mineral exploration; interpretation of geophysical data; organization of exploration programs; selected case histories. Lectures and laboratory.

GEOL 424 *Engineering Geology* (3 credits)

Prerequisite: GEOL 210 or equivalent; GEOL 213 and GEOL 324 recommended. Engineering properties of rocks and soils. Landslides, groundwater, frost action, and permanently frozen ground. Application of geology to engineering problems—concrete petrology, tunnels, slope control, foundations, roads, airports, dams, and reservoirs. One term paper to be prepared. The laboratory period includes field trips, engineering geology case histories, and feasibility study of engineering geology problems. Lectures and laboratory.

GEOL 440 *Seminar in Current Research on Environmental Earth Science* (3 credits)

Prerequisite: GEOL 331 or GEOL 377, or advanced standing in an engineering program, or permission of the Department. This course covers current research in environmental Earth science; topics vary from year to year, but will generally include: mantle-biosphere-atmosphere interactions, the carbon and methane cycles, and the geological climate record. Evaluation is based on seminar participation and written work.
NOTE: Students who have received credit for this topic under a GEOL or GEOL 498 number may not take this course for credit.

GEOL 498 *Advanced Topics in Geology*
(3 credits)

GEOL 499 *Advanced Topics in Geology*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.160 HISTORY

Faculty	Chair STEPHEN J. SCHEINBERG, <i>Professor</i>	NORMAN INGRAM FREDERICK H. KRANTZ SHANNON MCSHEFFREY DIANA PEDERSEN ROSEMARIE SCHADE FRANZISKA E. SHLOSSER MARTIN SINGER WALTER VAN NUS
	<i>Professors Emeritus</i> ALAN H. ADAMSON DONALD E. GINTER EDWARD E. McCULLOUGH	
	<i>Professors</i> FREDERICK BODE RICHARD J. DIUBALDO RONALD RUDIN ROBERT TITTLER MARY VIPOND	<i>Adjunct Professors</i> GEOFFREY ADAMS CHARLES L. BERTRAND GISELA CHAN MAN FONG DOLORES CHEW ROBERT T. COOLIDGE MICHAEL MASON DONALD SAVAGE IRVING H. SMITH SYLVIE TASCHEREAU FIONA TOMASZEWSKI
	<i>Associate Professors</i> GRAHAM CARR FRANK R. CHALK M. GRAEME DECARIE CAROLYN FICK JOHN L. HILL	
Location	<i>Loyola Campus</i> Vanier Extension, Room: VE 323	<i>Sir George Williams Campus</i> J.W. McConnell Building, Room: LB 601 (514) 848-2435
	It is the mission of the Department of History not only to train historians but to produce articulate and informed graduates who share its commitment to serving the broader community. The Department therefore encourages strength in both teaching and research, responsiveness to a wide range of intellectual perspectives, and involvement in community affairs.	

Programs	Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.
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60 BA Honours in History

The following courses in an approved sequence constitute Honours in History. Students intending to enter the Honours program are advised to consult with the Department.

A. Honours Essay Option

- 6 European History (HIST 201³, 202³)
- 6 North American History (from among HIST 203³, 205³, 209³, 210³, 251³, 253³)
- 6 Non-Western History (from among HIST 206³, 207³, 261³, 262³, 263³, 264³, 276³, 277³)
- 3 HIST 200- or 300-level courses
- 12 HIST 300-level courses
- 3 HIST 304³ (*Tutorial Preparation for the Honours Essay*)
- 3 HIST 402³ (*The Philosophy and Practice of History*)
- 3 HIST 403³ (*Methodology and History*)
- 6 HIST 493⁶ (*Honours Essay Tutorial*)
- 12 HIST 400-level seminars

B. Seminar Option

- 6 European History (HIST 201³, 202³)
- 6 North American History (from among HIST 203³, 205³, 209³, 210³, 251³, 253³)
- 6 Non-Western History (from among HIST 206³, 207³, 261³, 262³, 263³, 264³, 276³, 277³)
- 6 HIST 200-level courses
- 12 HIST 300-level courses
- 3 HIST 402³ (*The Philosophy and Practice of History*)
- 3 HIST 403³ (*Methodology and History*)
- 18 HIST 400-level seminars

60 BA Specialization in History

- 6 European History (HIST 201³, 202³)
- 6 North American History (from among HIST 203³, 205³, 209³, 210³, 251³, 253³)
- 6 Non-Western History (from among HIST 206³, 207³, 261³, 262³, 263³, 264³, 276³, 277³)
- 6 HIST 200-level courses
- 27 HIST 300-level courses

3	HIST 312 ³ (<i>Historical Approaches and Practices</i>)	3	300-level post-1800 Canadian, American, British, or European HIST
6	Chosen from any HIST 400-level courses	6	300-400 level History elective credits
60	BA Joint Specialization in English and History	42	BA Major in History
6	Chosen from ENGL 264 ³ , 265 ³ , 266 ³	6	European History (HIST 201 ³ , 202 ³)
6	Periods before 1800 (British and European) from ENGL 302 ⁶ through 324 ⁶ , 430 ³ through 441 ³	6	North American History (from among HIST 203 ³ , 205 ³ , 209 ³ , 210 ³ , 251 ³ , 253 ³)
6	Canadian, American, and postcolonial from ENGL 363 ³ through 388 ³ , 448 ³ through 454 ³	6	Non-Western History (from among HIST 206 ³ , 207 ³ , 261 ³ , 262 ³ , 263 ³ , 264 ³ , 276 ³ , 277 ³)
6	19th century and 20th century (British and European) from ENGL 324 ³ through 359 ³ , 394 ³ , 442 ³ , 443 ³ , 445 ³ through 447 ³	18	Chosen from any HIST 300-level courses
6	Elective credits from ENGL 224 ³ through 499 ³	6	Chosen from any HIST 300- or 400-level courses
6	HIST 201 ³ , 202 ³	24	Minor in History
6	Chosen from HIST 203 ³ , 205 ³ , 251 ³ , 253 ³	12	HIST 200-level (<i>Field Surveys</i>) from among: European History (HIST 201 ³ , 202 ³) or North American History (from among HIST 203 ³ , 205 ³ , 209 ³ , 210 ³ , 251 ³ , 253 ³) or Non-Western History (from among HIST 206 ³ , 207 ³ , 261 ³ , 262 ³ , 263 ³ , 264 ³ , 276 ³ , 277 ³)
6	200-300 level non-Western HIST	12	credits in History with a minimum of six credits at the 300 level
3	300-level pre-1800 Canadian, American, British, or European HIST		

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.:

- (1) 300-level courses are generally open only to students who have successfully completed 24 credits. Students who do not have this prerequisite may register with the permission of the Department.
- (2) 400-level courses are generally open to Honours and Specialization students, or students of high academic standing, or with the permission of the Department.

HIST 201 *Introduction to European History to 1789* (3 credits)

A survey of the history of Europe to the French Revolution, with emphasis on the development of ideas and political institutions.

HIST 202 *Introduction to European History, from 1789 to the Present* (3 credits)

A survey of the history of Europe from the French Revolution to the present, with emphasis on the development of ideas and political institutions.

HIST 203 *History of Canada, Pre-Confederation* (3 credits)

A survey of Canadian history, from settlement to Confederation, emphasizing readings and discussions on selected problems.

HIST 205 *History of Canada, Post-Confederation* (3 credits)

A survey of Canadian history from Confederation to the present, emphasizing readings and discussions on selected problems.

HIST 206 *Introduction to the Non-Western World I* (3 credits)

By giving an account of the worlds of Asia, Africa and the Americas between c. 1400 and

c. 1900 we seek to show the interplay between local and international historical developments in the making of the global economy. In this course, we study both the largely autonomous developments of such centres of civilization as China and the Ottoman Empire, and the effects on the non-Western world of European expansion. The course ends with a discussion of the Age of Empire.

HIST 207 *Introduction to the Third World, 1945 to the Present* (3 credits)

This course covers the emergence and development of the Third World from 1945 to the present. It focuses principally on the development policies of Third World leaders and seeks to explain the effects which they have had on economic and social development.

HIST 209 *Québec to 1867* (3 credits)

An introductory survey of the history of Québec from its origins as a colony to the creation of modern Canada by the British North American Act of 1867. Particular emphasis is placed on a consideration of those elements of Québec's past which best assist in the comprehension of the trends prevalent in modern Québec.

HIST 210 *Québec since Confederation*
(3 credits)

A survey of the history of Québec from the time of Confederation until the present. While due emphasis is placed on political developments in the province, the purpose of the course is to acquaint the student with the significant economic and social trends in modern Québec.

HIST 215 *History of Recreation and Leisure in Canada* (3 credits)

A survey of the history of recreation and leisure from the time of European contact with native peoples to the present day. It is placed in the context of Canadian history to examine such phenomena as European and American influences on Canada, effects of urbanization, the roles of women in society, and the commercialization of leisure. Recreation and leisure are understood to include not only sports and games, but such activities as rural bees, education, drinking, gambling, and celebrations. The course also provides an introduction to the historical literature on recreation and leisure, and to the discipline of History.

HIST 219 (also listed as CLAS 230)
Ancient Near East (3 credits)

A political, social, economic, and intellectual history of the ancient Near East, this course surveys the period from the origins of civilization in the middle of the fourth millennium to Alexander the Great's conquest of the Persian Empire in the latter part of the fourth century B.C.

NOTE: Students who have received credit for CLAS 230 may not take this course for credit.

HIST 223 (also listed as CLAS 240)
Greek History from the Bronze Age to Alexander (3 credits)

This course offers a political, social, economic, and cultural history of Greece from the Minoan-Mycenaean period in the second millennium to the end of Classical Greek civilization in the fourth century B.C., with special emphasis placed upon Athens.

NOTE: Students who have received credit for CLAS 240 may not take this course for credit.

HIST 225 (also listed as CLAS 242)
History of the Roman Republic (3 credits)

This course offers a political, social, economic and cultural history of Rome from the city's origins to the establishment of the Roman Empire under the Emperor Augustus.

NOTE: Students who have received credit for CLAS 242 may not take this course for credit.

HIST 251 *History of the United States to 1877* (3 credits)

Survey of American history from settlement to 1877. The course deals with the political and economic framework of American history, and with social and cultural trends.

HIST 253 *History of the United States since 1877* (3 credits)

Survey of American history from 1877 to the present. The course deals with the political and economic framework of American history, and with social and cultural trends.

HIST 261 *History of India* (3 credits)

An introduction to the intellectual traditions, social structures, and political institutions of South Asia, with particular attention to developments during the past two centuries.

HIST 262 *History of China* (3 credits)

A survey of China's history from earliest times to the modern era.

HIST 263 *History of Japan* (3 credits)

A survey of Japan's history from earliest times to the modern era.

HIST 264 *History of Africa* (3 credits)

An introductory survey of African history from the fifteenth century to the present. Particular emphasis is placed on pre-colonial Africa and the impact of colonialism on its political and economic patterns.

HIST 276 *History of Latin America: The Colonial Period* (3 credits)

A survey of Latin America up to the wars of independence from Spain. The main themes examined are: pre-Columbian cultures; the Spanish conquest; patterns of colonial trade and economy; the role of the church; the Bourbon reforms.

NOTE: Students who have received credit for HIST 371 may not take this course for credit.

HIST 277 *History of Latin America: The Modern Period* (3 credits)

A survey of Latin American society in the nineteenth and twentieth centuries. The principal topics covered are: the social and economic roots of political instability; Mexico under Porfirio Díaz; the Mexican Revolution; Argentina and Brazil under Perón and Vargas; U.S.-Latin American relations; Castro's Cuba; revolution and counter-revolution in contemporary Latin America.

NOTE: Students who have received credit for HIST 374 may not take this course for credit.

HIST 298 *Selected Topics in History* (3 credits)

HIST 299 *Selected Topics in History* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

HIST 300 *British North America* (3 credits)

Prerequisite: See N.B. number (1). This course

examines British imperial policy, cross-cultural contact and the development of colonial societies in 18th- and 19th-century North America.

HIST 301 *Late Nineteenth-Century Canada* (3 credits)

Prerequisite: See N.B. number (1). This course examines the politics of confederation and explores the social, economic, and cultural impact of modernization.

HIST 304 *Tutorial Preparation for the Honours Essay* (3 credits)

Prerequisite: Approved Honours standing in History, or permission of the Department. This course provides Honours students in History with the opportunity for tutorial reading and research in preparation for the writing of the Honours Essay.

HIST 305 *Women in Canadian History* (3 credits)

Prerequisite: See N.B. number (1). A survey of the position and roles of women in Canadian society from the seventeenth century to the present. Topics covered include women's work, the family and the pre-industrial and modern industrial economies; ideological constructions of femininity, motherhood, and sexuality; and the development of feminist and anti-feminist movements.

HIST 306 *Introduction to Public History* (3 credits)

Prerequisite: See N.B. number (1). This course is an examination of the practice of history outside the academy and an introduction to the critical analysis of presentations of history in public and popular culture. Topics include archives, corporate and popular history, museums and historic sites, preservation, film and television, theme parks, and anniversary commemorations. There will be a special emphasis on public controversies involving historical interpretations.

NOTE: Students who have received credit for HIST 347 may not take this course for credit.

HIST 307 *History of Montréal* (3 credits)

Prerequisite: See N.B. number (1). A study of the origins of the city, its role in the Empire of the St. Lawrence, and its rise to metropolitan dominance in Canada. Special emphasis on economic development and on ethnic groupings.

HIST 308 *History of English-Speaking Québec* (3 credits)

Prerequisite: See N.B. number (1). An analysis of the experience of the different groups which have made up this community, from the Conquest to the present.

HIST 309 *History of the Canadian North* (3 credits)

Prerequisite: See N.B. number (1). An intensive study of the advance of the northern frontier of Canada, with emphasis on the period 1840-1945.

The course stresses exploration, problems of sovereignty, conflict of cultures, and economic development.

HIST 310 *Canada in the Early Twentieth Century, 1896-1939* (3 credits)

Prerequisite: See N.B. number (1). An intensive study of early twentieth-century Canada concentrating on selected themes in economic, political, social, and cultural history.

HIST 311 *Contemporary Canada, 1939 to the Present* (3 credits)

Prerequisite: See N.B. number (1). An intensive study of Canada since World War II concentrating on selected themes in economic, political, social, and cultural history.

HIST 312 *Historical Approaches and Practices* (3 credits)

Prerequisite: Specialization or Major in History, or permission of the Department. This course addresses a specific historical problem which varies from year to year depending on the instructor. Historiography and methods (including online research) are emphasized.

NOTE: Students who have received credit for HIST 302, 303, 397, 402, or 403 may not take this course for credit.

HIST 313 *Québec in the Nineteenth Century* (3 credits)

Prerequisite: See N.B. number (1). This course explores the major social, economic, and political issues that arose during the 1800s in the transformation of Québec from a pre-industrial to an industrial society.

HIST 314 *Québec in the Twentieth Century* (3 credits)

Prerequisite: See N.B. number (1). This course explores the major social, economic, and political issues of twentieth-century Québec in the light of the concentration of economic power into relatively few hands early in the century and the declining importance of industrial production since World War II.

HIST 316 *History of the Byzantine Empire, 602-1056* (3 credits)

Prerequisite: See N.B. number (1). A survey of the transformation from Late Antiquity into the Byzantine commonwealth. Changes in economic and social conditions will provide the general framework, with special attention given to the reorganization of administrative and military structures, Byzantium's relationship with its Balkan neighbours, the Arab conquest, and the rising importance of Asia Minor.

NOTE: Students who have received credit for HIST 324 may not take this course for credit.

HIST 317 *Canada Views the United States* (3 credits)

Prerequisite: See N.B. number (1). An examination of Canadian attitudes to the United States

from 1776 to the present, with respect to both specific incidents and general trends. Emphasis is placed on the discussion of primary source material.

HIST 318 *History of the Byzantine Empire, 1056–1453* (3 credits)

Prerequisite: See N.B. number (1). A survey of Byzantine Empire from the end of the Macedonian dynasty to the Turkish conquest of Constantinople. Changes in economic and social conditions will provide the general framework, with special attention given to the reorganization of administrative and military structures, Byzantium's relationship with its Balkan neighbours, the Islamic conquest, and the rising importance of Asia Minor.

NOTE: Students who have received credit for HIST 324 may not take this course for credit.

HIST 319 *Canadian History in Literature, Art and Film* (3 credits)

Prerequisite: See N.B. number (1). An examination of some major events and themes in Canadian history as seen by writers, artists, and film-makers. Topics will vary from year to year, but will be selected to illustrate how creative works may be combined with more conventional historical sources to enhance our understanding of the past.

**HIST 323 *(also listed as CLAS 341)*
Greek History from Alexander to the Roman Conquest (3 credits)**

Prerequisite: See N.B. number (1). A political, social, economic, and cultural history of the Greek world from Alexander the Great to the Roman conquest of Greece in 146 B.C.

NOTE: Students who have received credit for CLAS 241/HIST 224 or CLAS 341 may not take this course for credit.

HIST 325 *Renaissance Europe* (3 credits)

Prerequisite: See N.B. number (1). This course explores the transition from later Medieval to Renaissance Europe. Special attention is given to the nature, development, and influence of the Italian Renaissance. Attention is also given to social and political issues in early modern Europe.

HIST 326 *Reformation and Counter-Reformation in Early Modern Europe* (3 credits)

Prerequisite: See N.B. number (1). An examination of the European Reformation and Counter-Reformation. Beginning with the late medieval context, the course stresses the significance of the period for the development of Western thought and society.

**HIST 327 *(also listed as CLAS 343)*
History of the Roman Empire (3 credits)**

Prerequisite: See N.B. number (1). This course offers a political, social, economic, and cultural history of the Roman Empire from Augustus to

the end of the Roman Empire in the West.

NOTE: Students who have received credit for CLAS 243/HIST 226 or CLAS 343 may not take this course for credit.

HIST 328 *Social and Intellectual History of Early Modern Europe* (6 credits)

Prerequisite: See N.B. number (1). A study of change and continuity in European society and culture, 1300-1650. Problems studied include feudal-capitalist relationships, the Italian Renaissance, Northern State Development, Protestant Reformation, Scientific Revolution, and European Colonial expansion. Methodological issues are emphasized.

HIST 329 *Women in Western History I* (3 credits)

Prerequisite: See N.B. number (1). A survey of the position and roles of women in Western history from antiquity to the French Revolution. Themes analysed in the lectures and in discussions include: women's position in early law; the concept of courtly love; women in the French Revolution; the working woman in pre-industrial Europe.

HIST 330 *Urban Society in Early Modern Europe* (3 credits)

Prerequisite: See N.B. number (1). This course is a survey of urban society from the Renaissance to the eve of Industrialization (c. 1450–1750), with an emphasis on cities in Western and Central Europe. Particular attention will be paid to civic building and urban planning, population and social structure, political and economic organization, economic life, and civic culture.

HIST 331 *Women in Western History II* (3 credits)

Prerequisite: See N.B. number (1). A survey as above but covering the period from after the French Revolution to modern times. Themes analysed in the lecture and in discussions include: women in post-industrial Europe; the Suffrage Movement; the Feminist Movement in Europe and North America; women during the two World Wars; women in the modern work-force.

HIST 332 *Social History of Costumes and Interiors I* (3 credits)

Prerequisite: See N.B. number (1). A social history of European civilization as reflected by fashions in dress and interiors. Dress especially mirrors accurately a society's ideals in aesthetics and morals; interiors indicate lifestyles and social habits. Both costumes and interiors are treated in this course as an illustration of social history underscoring social change as from era to era. The course covers a time-span from the Middle Ages to the Renaissance, including a brief introduction to the classical period.

HIST 333 *Social History of Costumes and Interiors II* (3 credits)

Prerequisite: See N.B. number (1). Based on

the same principles as HIST 332, this course covers a time-span from the Reformation to the Victorian Age.

HIST 334 *Social and Intellectual History of Modern Europe* (6 credits)

Prerequisite: See N.B. number (1). The intellectual systems arising in Europe since the seventeenth century are explored in the context of the economic and social circumstances which engendered them. This course begins with the rise of theories of "possessive individualism", and ends with the contemporary cultural crisis. While attention is paid to the general dynamics of culture, special attention is devoted to the social functions of particular ideologies.

HIST 335 *Barbarian Invasions and the Birth of Europe* (3 credits)

Prerequisite: See N.B. number (1). This course examines the arrival and settlement of new populations in the Roman world. It analyses the changes that this event brought in its wake. Classical civilization was disrupted, but there was also a symbiosis of the old and the new, which in time gave rise to Europe in the Middle Ages.

HIST 336 *Late Antiquity: Continuity and Change* (3 credits)

Prerequisite: See N.B. number (1). This course examines the similarities and contrasts between society in Late Antiquity and the new societies that arose based on Christianity, barbarian kingdoms, and the East Roman Empire. We pursue what Peter Brown has called *The World of Late Antiquity*, its culture, social patterns, political institutions, and economic conditions that interlock to form new and distinct societies in a world that had regarded itself for centuries as being "universal".

HIST 337 *History of Early Medieval Europe* (3 credits)

Prerequisite: See N.B. number (1). A study of European society during the Early Middle Ages. The course will explore the fall of the Roman Empire in the West, the period of invasions, the conversions to Christianity and the development of the Western Latin Church, the rise of the Carolingians, the Viking raids, and the structures of society and politics.

NOTE: Students who have received credit for HIST 322 may not take this course for credit.

HIST 338 *History of Later Medieval Europe* (3 credits)

Prerequisite: See N.B. number (1). A study of European society during the Later Middle Ages. The course will explore the ramifications of the revival of urban and commercial life, the development of national monarchies in France, England, and Spain, the varying fortunes of the Holy Roman Empire, the rise and fall of papacy, the problem of dissent in a theoretically unified society, and the effects of economic chaos and epidemics in the age of the Black Death.

NOTE: Students who have received credit for HIST 322 may not take this course for credit.

HIST 340 *History of England, c. 1460–1714* (3 credits)

Prerequisite: See N.B. number (1). This course is a survey of the political, economic, and social development of England from the late Middle Ages through the Stuart Era.

NOTE: Students who have received credit for HIST 342 may not take this course for credit.

HIST 341 *History of Britain Since 1714* (3 credits)

Prerequisite: See N.B. number (1). This course is a survey of the political, economic, and social development of Britain since the Stuart Era.

NOTE: Students who have received credit for HIST 342 may not take this course for credit.

HIST 344 *Tudor England* (3 credits)

Prerequisite: See N.B. number (1). A detailed examination of the political, social, and economic aspects of England in the Tudor age, 1485-1603. Particular attention is paid to "The New Monarchy", the Henrician Reformation and its consequences, the "Mid-Tudor Crisis", tensions between local and national interests, Elizabethan government, economic change, Puritanism and Catholicism, and the problem of order.

HIST 348 *History of Ireland* (3 credits)

Prerequisite: See N.B. number (1). A survey course that traces the history of Ireland from 432 A.D. to the present. Emphasis is on the nineteenth and twentieth centuries. Special attention is given to the development of Irish nationalism and relations with Great Britain. Irish music and literature is used to supplement the historical perspective.

HIST 349 *Family, Sex and Marriage in Pre-Industrial Europe* (3 credits)

Prerequisite: See N.B. number (1). This course deals with the development of marriage and other family relationships in the pre-industrial West, from the beginning of the Middle Ages to about 1700. Topics to be considered include Christian influence on Western ideas about sexuality and marriage; the organization of work within families; how families influenced gender identities; and attitudes towards child-rearing and education.

HIST 350 *Medieval England* (3 credits)

Prerequisite: See N.B. number (1). This course examines the history of England between the Norman Conquest in 1066 and 1500. Topics include the political, social, and cultural impact of the Norman Conquest; Jews and the expulsion of 1290; knights and peasants; the Peasant's Revolt of 1381; crime and the Robin Hood legends; heresy and popular religion; urban culture and guilds.

HIST 351 *German History in the 19th Century* (3 credits)

Prerequisite: See N.B. number (1). A study of

the ideological, cultural, political, and socio-economic development of Germany from the break-up of the Holy Roman Empire to the First World War.

NOTE: Students who have received credit for HIST 345 may not take this course for credit.

HIST 352 *German History in the 20th Century* (3 credits)

Prerequisite: See N.B. number (1). A study of the ideological, cultural, political, and socio-economic development of Germany from the First World War to the present.

NOTE: Students who have received credit for HIST 345 may not take this course for credit.

HIST 353 *Colonial America* (3 credits)

Prerequisite: See N.B. number (1). This course examines the earliest period of American history. It gives special emphasis to the nature of Amerindian society, white-Amerindian contact, and the varieties of colonial settlement patterns.

HIST 354 *Revolutionary America* (3 credits)

Prerequisite: See N.B. number (1). This course examines themes and issues in the revolutionary and early national periods of American history.

HIST 355 *United States in the Nineteenth Century, 1815–1850* (3 credits)

Prerequisite: See N.B. number (1). A study of American political, social, and economic life from the end of the War of 1812 to about 1850 – the intensification of sectionalism. Topics include geographic expansion and the beginnings of industrialization, the characteristics of southern slave society, and the rise of a system of political parties during the age of Jackson.

HIST 356 *United States in the Nineteenth Century: The Era of the Civil War* (3 credits)

Prerequisite: See N.B. number (1). A study of American political, social, and economic life before and after the Civil War, from about 1850 to 1890. Topics include sectionalism and the breakdown of parties during the 1850s, the tasks of Reconstruction after the war, the New South, and the problems of a maturing industrial society.

HIST 357 *Foreign Relations of the United States to 1917* (3 credits)

Prerequisite: See N.B. number (1). An analysis of United States foreign policy from the American Revolution to United States' entry into World War I, emphasizing the domestic debate over foreign policy and economic development, commercial and territorial expansion, and the dynamics of Canadian-American relations.

HIST 358 *Foreign Relations of the United States, 1917 to the Present* (3 credits)

Prerequisite: See N.B. number (1). A historical investigation of United States foreign policy from

American intervention in the Russian Revolution to the present, emphasizing the United States' responses to the challenge of revolutions in Asia and Africa, American conceptions of a new world order, the rise of the multinational corporation and its impact on Canadian-American relations.

**HIST 359 *(also listed as SOCI 366)*
The History and Sociology of Genocide to 1920 (3 credits)**

Prerequisite: See N.B. number (1). Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that have led to it up to 1920.

NOTE: Students who have received credit for HIST 368 or SOCI 366 or 368 may not take this course for credit.

**HIST 360 *(also listed as SOCI 367)*
The History and Sociology of Genocide from 1920 to the Present (3 credits)**

Prerequisite: See N.B. number (1). Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that led to genocide from 1920 to the present.

NOTE: Students who have received credit for HIST 368 or SOCI 367 or 368 may not take this course for credit.

HIST 361 *Africa in the Nineteenth Century* (3 credits)

Prerequisite: See N.B. number (1). The central focus of this course is the European assault on Africa and the unfolding of colonial economy and society. Some emphasis is placed on resistance to colonialism and the origins of nationalism.

HIST 362 *Traditional China* (3 credits)

Prerequisite: See N.B. number (1). An examination of Chinese history from the beginning to the Ch'ing dynasty (c. 1800). Emphasis is placed on China's political, intellectual, and cultural heritage.

HIST 363 *Africa in the Twentieth Century* (3 credits)

Prerequisite: See N.B. number (1). This course deals with questions of nationalism and of the economic and social development of colonial and post-colonial Africa. There is particular focus on liberation and revolutionary movements.

HIST 364 *India/Pakistan: Empire and Resistance, 1750–1950* (3 credits)

Prerequisite: See N.B. number (1). British conquest established nearly two centuries of colonial rule over the world's oldest civilization. This course examines the nature of imperial control, the resistance of traditional leaders, European intellectual imperialism, Indian cultural and religious revivalism, and modern nationalism. Special attention is paid to M.K. Gandhi and Gandhism as well as to Muslim separatism and the Pakistan movement.

HIST 365 *India/Pakistan: Money and Society Since 1800* (3 credits)
 Prerequisite: See N.B. number (1). British India was a vital part of a great commercial and industrial empire at the highest stage of capitalism. This course explores the economic and social impact of this period on Indian society up to the present. Imperial capitalism, the Indian entrepreneurial elites, peasants and famine, industrialization, the effects of two world wars, and the challenge of communist and Islamic movements since independence are investigated.

HIST 366 *Nineteenth Century China* (3 credits)
 Prerequisite: See N.B. number (1). An intensive study of Chinese history between 1800 and the beginnings of the Chinese Revolution with emphasis on problems in political, social, and intellectual history.

HIST 367 *Twentieth Century China* (3 credits)
 Prerequisite: See N.B. number (1). An intensive study of Chinese history since 1900 with emphasis on problems in political, social, and intellectual history.

HIST 369 *English Urban Community: From Feudalism to Industrialism, 1300–1700* (3 credits)
 Prerequisite: See N.B. number (1). Topics include: the elements of urban geography; emergence of the town from the countryside; the late Medieval urban crisis; the impact of the Reformation on English towns; urban demographic patterns; commercial and industrial structures; new towns; civic planning and building; social control in the urban community; the emergence of an urban cultural identity. Familiarity with English history, English literature, pre-industrial European history, or urban history is helpful but not essential.

HIST 370 *The Modern Middle East to 1945* (3 credits)
 Prerequisite: See N.B. number (1). This course is intended to provide a general historical background to the Middle East. Beginning with a discussion of the rise of Islam, it continues through the period of the rise of nationalism and ends at the beginning of the contemporary era.

HIST 372 *The Contemporary Middle East, 1945 to the Present* (3 credits)
 Prerequisite: See N.B. number (1). This course discusses the contemporary Middle East, focusing on such questions as the end of European influence, nationalism, fundamentalism and the Gulf War.

HIST 375 *History of the Colonial Caribbean* (3 credits)
 Prerequisite: See N.B. number (1). This course covers the period from pre-Columbian contact to

the late eighteenth century. Themes include the origins of sugar and slavery; the slave trade; the rise of colonialism; the emergence and maturation of colonial social structure.

NOTE: Students who have received credit for HIST 380 may not take this course for credit.

HIST 376 *The Caribbean and the Atlantic World* (3 credits)
 Prerequisite: See N.B. number (1). This course covers the period from the seventeenth century to the end of the nineteenth century. Themes include slavery and the slave community; modes of adaptation and resistance; the politics and economics of abolition; alternative labour forms; the rise of political movements.

NOTE: Students who have received credit for HIST 380 may not take this course for credit.

HIST 377 *History of Russia* (3 credits)
 Prerequisite: See N.B. number (1). This course traces the origins of the medieval Russian state from the ninth century to the emergence of the Russian Empire. Emphasis is placed on political, social, and economic problems of the eighteenth and nineteenth centuries. Particular attention is devoted to the Revolutions of 1905 and 1917.

HIST 378 *History of the Soviet Union* (3 credits)
 Prerequisite: See N.B. number (1). This course examines the ideological roots of the Bolshevik Revolution, and traces the main economic, social, and political developments of the Soviet Union. In addition, an analysis of Soviet foreign policy is presented from 1917 to the present.

HIST 382 *Age of Enlightenment 1715–1789* (3 credits)
 Prerequisite: See N.B. number (1). An examination of major developments in European society from the death of Louis XIV to the French Revolution. Special attention is given to social and intellectual movements, more particularly to the rise of the bourgeoisie and to the key ideas of the Enlightenment.

HIST 383 *Age of Revolution 1789–1848* (3 credits)
 Prerequisite: See N.B. number (1). A study of the dual Revolution — industrial and political — in England and France, and its initial consequences throughout Europe.

HIST 384 *Age of Industrialization and Nationalism 1848–1914* (3 credits)
 Prerequisite: See N.B. number (1). A study of the transformation of European society, economy, and politics in the years between the upheavals of the mid-nineteenth century and the collapse of the traditional order in World War I.

HIST 385 *Age of Dictators: Europe, 1914–1945* (3 credits)
 Prerequisite: See N.B. number (1). A study of

the internal development and external relations of the nations of Europe from the Great War to the end of World War II. The course examines this chaotic age primarily through an investigation of the revolutionary and reactionary upheavals that kept Europe socially, politically, and economically unbalanced for 30 years.

HIST 386 *Contemporary Europe: 1945 to the Present* (3 credits)

Prerequisite: See N.B. number (1). A study of the internal development and external relations of the nations of Europe from the collapse of Nazi Germany to the present. The course concentrates on the divisions between East and West, the economic recovery of Europe and the effects of the energy crisis on social, economic, and political life throughout Europe.

HIST 388 *History of Modern Italy: 1848 to 1922* (3 credits)

Prerequisite: See N.B. number (1). A survey of the crucial developments in Italian history from the Risorgimento to the rise of fascism. The course emphasizes the problems surrounding the creation of a united Italy. Specifically, the course examines the issues raised by nationalism, liberalism, Catholicism, and industrialization.

HIST 389 *History of Modern Italy: 1922 to the Present* (3 credits)

Prerequisite: See N.B. number (1). A survey of the crucial developments in Italian history from Mussolini's seizure of power to the present. The course examines the role and legacy of fascism, the creation of the republic, the economic miracle, the political and social turmoil, and the rise of terrorism.

HIST 390 *France 1789–1871* (3 credits)

Prerequisite: See N.B. number (1). This course introduces students to the history of France from the Revolution of 1789 to the Franco-Prussian War of 1870. Of central concern is the importance of the revolutionary heritage in nineteenth-century French history, but the course also looks at intellectual, social, and literary developments.

HIST 391 *Independent Study Tutorial in History* (3 credits)

Prerequisite: See N.B. number (1). This course permits individual study, with a selected faculty member, in a specialized area not available among regular 300-level classes.

HIST 392 *France 1871 to the Present* (3 credits)

Prerequisite: See N.B. number (1). This course introduces students to the history of France from the Commune of 1871 to the Fifth Republic. This course deals with such issues as the Dreyfus Affair, the legacy of two World Wars in French history, the Vichy regime, collaboration and French fascism, the May events of 1968, and so forth. Political, social, and intellectual developments will be discussed.

HIST 393 *Vietnam War* (3 credits)

Prerequisite: See N.B. number (1). The protracted Vietnamese conflict in both its French (1940-54) and American (1955-75) phases is analysed using lectures, audio-visual materials, documents, and soldiers' accounts. Vietnam's historical evolution and colonial experience are briefly discussed as essential to understanding the war as a military, political, and cultural struggle.

HIST 394 *The United States 1890–1920* (3 credits)

Prerequisite: See N.B. number (1). This course includes the rise of the corporation and the trade unions. The Populist, Progressive, and Suffrage Movements are given major attention.

HIST 395 *The United States 1920–1945* (3 credits)

Prerequisite: See N.B. number (1). A study of Post World War I America that extends through World War II. Political and social history are emphasized.

HIST 396 *The United States Since 1945* (3 credits)

Prerequisite: See N.B. number (1). The immediate historical background of today's America is the subject matter of this course. Major themes include civil rights, the rise of modern feminism, and economic change.

HIST 398 *Selected Topics in History* (3 credits)

HIST 399 *Selected Topics in History* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

HIST 402 *The Philosophy and Practice of History* (3 credits)

Prerequisite: Approved Honours standing in History, or permission of the Department. This course examines problems in the philosophy and practice of history. Particular attention is given to contemporary debates about history as a distinctive mode of understanding and explanation. This course is required of all Honours students.

NOTE: Students who have received credit for HIST 302 or 397 may not take this course for credit.

HIST 403 *Methodology and History* (3 credits)

Prerequisite: Approved Honours standing in History, or permission of the Department. This course examines the variety of sources, methods, and modes of analysis used in the research and writing of history. It addresses both theoretical and practical aspects of

method. This course is required of all Honours students.

NOTE: Students who have received credit for HIST 303 or 397 may not take this course for credit.

HIST 411 Seminar in Canadian History
(6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in the history of Canada. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 412 Advanced Study in Canadian History
(3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Canada. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 436 Seminar in European History
(6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Europe. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 437 Advanced Study in European History
(3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Europe. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 451 Seminar in American History
(6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in the history of the United States. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 452 Advanced Study in American History
(3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of the United States. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 461 Seminar in Asian History
(6 credits)

Prerequisite: See N.B. number (2). Advanced

seminar in Asian history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 462 Advanced Study in Asian History
(3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in Asian history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 470 Seminar in African History
(6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in the history of Africa. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 471 Advanced Study in African History
(3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Africa. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 476 Seminar in the Third World
(6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in the history of the Third World. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 477 Advanced Study in the Third World
(3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of the Third World. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 478 Seminar in Women's History
(6 credits)

Prerequisite: See N.B. number (2). Advanced seminar in women's history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 479 Advanced Study in Women's History
(3 credits)

Prerequisite: See N.B. number (2). Advanced

seminar in a selected topic in women's history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 491 *Individual Study Tutorial in History* (3 credits)

Prerequisite: See N.B. number (2). This course permits an individual student to pursue advanced study, with a selected faculty member, in a specialized area not available among scheduled 400-level seminars.

HIST 492 *Individual Study Tutorial in History* (6 credits)

Prerequisite: See N.B. number (2). This course permits an individual student to pursue advanced study, with a selected faculty member, in a specialized area not available among scheduled 400-level seminars.

HIST 493 *Honours Essay Tutorial* (6 credits)

Prerequisite: See N.B. number (2). This course is open only to Honours students in History. The student works with an individual faculty member in a particular area of history. Students are asked to produce a sustained piece of written work, not exceeding 40 pages in length, to be read by their adviser and at least one other member of the Department.

HIST 498 *Advanced Topics in History* (3 credits)

HIST 499 *Advanced Topics in History* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.170 INTERDISCIPLINARY STUDIES

Administrator
ROBERT D. KILGOUR

*Program
Objectives*

The Faculty of Arts and Science *Principles of Education* (§31.001) reinforce the value of broadening skills and experience beyond the boundaries of a single concentration. Interdisciplinary studies involves students in a range of thought, from scientific to humanistic. Courses are designed to illuminate principles, methods, and skills that cross disciplinary boundaries. These programs are intended for students whose interests do not conform to standard academic programs.

Admission

INDIVIDUALLY STRUCTURED PROGRAMS

Opportunities are available in some departments and programs to follow an Individually Structured Specialization or Honours program. Students must apply to the Department that seems most relevant to the central aspect of their proposed program. Students in general must have demonstrated in their previous academic endeavours that they are capable of good standing ("B" level), but in exceptional cases a student may be admitted provisionally on the recommendation of the departmental undergraduate coordinator.

Formal entry to the ISP may occur only after completion of preparatory courses such as are required in Mature Entry and Extended Credit programs. Students wishing to follow an Honours program must follow the Faculty procedures and regulations concerning admission to Honours programs. (See Degree Requirements — Honours, §16.2.3 and 31.003.) Students interested in completing a Joint Honours program should contact M. Santateresa for advising.

*Academic
Regulations*

The program will consist of not less than 60 credits. The courses chosen must be based on a departmental or program core, usually the Major, but not less than 24 credits. Students will thus be required to complete necessary prerequisites, and general preparation courses such as Research Methods or Statistics, so that they could later follow a regular departmental program if they so desire.

A Specialization student must maintain an average of "C+" in all Specialization courses for purposes of continuation in the program from year to year, as well as for graduation. The minimum acceptable grade in any single Specialization course is "C-".

The program of study must be worked out at the time of registration into the program. Admission to the program must be finalized before a student registers for the final 60 credits of the 90-credit portion of their degree. To allow for the non-availability of certain courses during certain sessions, allowable substitute courses must be listed in advance. Such substitution provisions will be necessary only in the case of specialized courses that are known not to be available on a session by session basis. The intention of this regulation is to assure that the program does not become an *ad hoc* mixture of courses without clearly rationalized academic coherence.

Students must prepare a careful, not necessarily long, statement of their goals indicating the specific reasons for their program choice. The rationale and the sequence of courses chosen must be approved by the departmental program coordinator and the Vice Dean, Student Affairs.

Programs

A Minor is a program consisting of 24 or more credits (see §16.2 and 31.003). Students may choose either a Minor program comprised of courses from a range of disciplines, or a Minor in a discipline other than their Honours, Specialization or Major program. Interdisciplinary and disciplinary Minors are listed below.

*Interdisciplinary
Minors*

Credits	Title	Cal. Sec.
30	Science and Human Affairs	31.300
30	Southern Asia Studies	31.170
30	Urban Studies	31.340
24	Lonergan Interdisciplinary Studies	31.530

<i>Disciplinary Minors</i>	Code	Credits	Title	Cal. Sec.
	ANTH	30	Anthropology	31.310
	BIOL	24	Biology	31.030
	CHEM	24	Chemistry	31.050
	CMLL	24	Classical Archaeology	31.060
		24	Classical Civilization	31.060
		24	Classical Language and Literature	31.060
		30	German	31.060
		30	Italian	31.060
		30	Spanish	31.060
		30	Linguistics	31.060
	ECON	30	Economics	31.080
	EDUC	24	Education	31.090
		24	Adult Education	31.090
	ENGL	24	English Language	31.100
		30	Creative Writing	31.100
	FRAN	24	Langue française	31.110
		24	Littératures de langue française	31.110
	GEOG	30	Geography	31.130
	GEOL	24	Geology	31.140
	HIST	24	History	31.160
	JOUR	30	Journalism	31.180
	MATH	24	Mathematics and Statistics	31.200
	PHIL	24	Philosophy	31.220
	PHYS	24	Physics	31.230
	POLI	24	Political Science	31.240
	PSYC	30	Psychology	31.250
	SOCI	30	Sociology	31.310
	THEO	24	Theological Studies	31.330
	LBCL	30	Western Society and Culture	31.520
	WSDB	30	Women's Studies	31.560

Program

INTERDISCIPLINARY STUDIES IN SEXUALITY

Students interested in this program should contact Dr. Frances Shaver, Program Coordinator, Faculty of Arts and Science, who will be replaced in July 2001 by Dr. Thomas Waugh from the Faculty of Fine Arts.

*Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.*

27 Minor in Interdisciplinary Studies in Sexuality

- 12 Chosen from INTE 391/FASS 391³, INTE 392/FASS 392³; SOCI 375/ ANTH 375^{3*}; FMST 392³; INTE 390/ FFAR 390⁶.
- 9 Elective credits on sexuality and sexual orientation chosen in consultation with the program coordinator from periodic topics courses and other suitable courses identified in a given year, and from the following regular courses:

AHSC 253³; ENGL 445³; FMST 391³; RELI 380³; WSDB 383³.

- 6 Chosen each year from courses in gender and women's studies in consultation with the program coordinator from a list of available offerings within departments of the Faculties of Arts and Science and Fine Arts.

**Prerequisites waived for students having completed six credits in the Minor in Interdisciplinary Studies in Sexuality.*

Programs

SOUTHERN ASIA STUDIES

*Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.*

42 BA Major in Southern Asia Studies

- 9 Required in first year: HIST 261³, RELI 213⁶
- 3 Chosen from HIST 364³, 365³, 393³, 461⁶
- 6 Chosen from RELI 224³, 225³, 226³, 340³, 341³, 342³, 344³, 345³, 346³, 347³, 348³, 350³, 384³

- 6 Chosen from POLI 336³, 424³, 482³
NOTE: Any one of the above courses may be substituted by a Special Topic course on Southern Asia in the same Department.
- 18 Chosen from any relevant courses in the core disciplines (not already counted towards the above requirements) or

courses dealing with Southern Asia in the Departments of Economics, Education, English, Geography, Sociology/Anthropology or the Faculties of Fine Arts and Commerce and Administration

30 Minor in Southern Asia Studies

- 9 Required: HIST 261³, RELI 213⁶
6 Chosen from HIST 364³, 365³, 393³,

461⁶; POLI 336³, 424³, 482³;
ECON 311³, 319³

- 6 Chosen from RELI 224³, 225³, 226³, 340³, 341³, 342³, 344³, 345³, 346³, 347³, 348³, 350³, 384³; FMST 335³
9 Elective credits from any courses dealing primarily with Southern Asia, and Special Topics courses in any discipline with a Southern Asia theme or focus

Clusters

A cluster is a sequence of courses (15 to 18 credits) on a given theme. It provides multi-disciplinary and interdisciplinary course content.

Credits	Cluster Name
18	Canadian Studies
18	Greek Studies
18	Health and Lifestyle
18	Introduction to Life Sciences
15	Irish Studies
18	Legal Studies
15	Marketing
18	Native Studies
18	Québec Studies
18	Spanish America
18	Preparing for Success in the Workplace: Skills, Issues and Practices
18	The Planet Earth: Studies in the Environment
15	Understanding Western Myth
15	The Basics of Business

Course information on these Clusters is listed in the Undergraduate Class Schedule.

Colleges, Institutes and Schools

Students wishing to pursue interdisciplinary studies may also wish to consider offerings in the Liberal Arts College §31.520, Lonergan University College §31.530, School of Community and Public Affairs §31.540, Science College §31.550, or Simone de Beauvoir Institute §31.560 (also described in §31.500).

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

**INTE 202 (also listed as LUCC 202)
The Creative Self** (3 credits)

This course explores the relationship between experience, understanding and coming to knowledge as a contemporary person in search of identity. It is structured around the exploration of these questions: How can life experience become a source of creative understanding? How can the learning process become one's own? What methods are available to help us learn how to learn? How can we learn to live what we know?
NOTE: Students who have received credit for LUCC 200 or 202 may not take this course for credit.

INTE 215 Ideas in Mathematics (3 credits)

Mathematical ideas and techniques permeate Western civilization, but because mathematics operates at a high level of abstraction and uses an esoteric language, its contribution is not well understood. Avoiding mathematical technicalities as much as possible, this course attempts to demonstrate a few of the powerful ideas that have animated the development of mathematics. Examples of mathematical thinking from various periods of mathematical history are examined

and related to their scientific and social impact.
NOTE: This course is designed as a suitable elective for students following an undergraduate program. It has no formal prerequisites and will not qualify students to enrol for any other mathematics course, and cannot be used to satisfy a mathematics requirement in any BA or BSc program.

NOTE: Students who have received credit for MATH 215 may not take this course for credit.

INTE 229 Philosophy and Literature (6 credits)

This course focuses on the interaction of philosophy and literature in a selected period of history (for example, the ancient world; the Middle Ages and Renaissance; and the modern world), through readings and discussion of literature with a high thematic content and philosophical writings with important literary connections.
NOTE: Students who have received a total of six credits for the set of courses consisting of INTE 230 or 231, or a total of six credits for the set of courses consisting of INTE 232 or 233, may complete the sequence by taking INTE 229 in the appropriate year (six credits).

INTE 290 Computer Applications
(3 credits)

This course is designed to introduce students to fundamental uses of computers in word processing, data management, and elementary programming, as a basis for more advanced applications within their disciplines. This is accomplished by means of a series of tutorial packages combining printed text, videotapes, and software. The format is self-instructional, encompassing 40 hours of hands-on experience in the laboratory.

NOTE: Computer Science students, or students enrolled in Mathematics and Statistics programs, may not take this course for credit.

INTE 291 Advanced Computer Applications (3 credits)

Prerequisite: INTE 290 or equivalent. This course introduces advanced uses of computer packages, including mail merge, electronic mail, file management, data communications. The format is self-instructional, using computer-based tutorial packages, videotapes, and text. A minimum of 40 hours of laboratory work is required.

INTE 293 Computer Application Development (3 credits)

This course introduces students to the use of contemporary computer tools in scientific applications. It is designed for students with some familiarity with the fundamentals of computing who wish to use computers as tools for research within science disciplines. The format is largely self-instructional, using computer-based tutorial packages. A minimum of 40 hours of laboratory work is required.

NOTE: See §200.7 for equivalent statistics courses.

INTE 296 Discover Statistics (3 credits)

This course introduces students to the basics of statistics and is aimed at mastering the elementary analytical concepts of the subject. Topics include descriptive statistics, correlation and regression analysis, experimental analysis (test procedures), probability (distribution and theory), hypothesis testing, and analysis of variance.

NOTE: Students who have received credit for this topic under an INTE 298 number may not take this course for credit.

NOTE: See §200.7 for equivalent statistics courses.

INTE 298 Special Topics (3 credits)

INTE 299 Special Topics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

**INTE 333 (also listed as LUCC 333)
Interdisciplinary Approaches
to the Study of Peace**
(6 credits)

This course aims to introduce students to the study of peace and enable them to think critically about contemporary circumstances that condi-

tion the search for peace. Using specific case studies and appropriate methodologies, the course examines the role of values, cultures, and ideologies in the attainment of peace. This course is presented in cooperation with the Loyola Peace Institute.

NOTE: Students who have received credit for INTE 499A or LUCC 333, 499A may not take this course for credit.

INTE 390 HIV/AIDS: Cultural, Social and Scientific Aspects of the Pandemic (6 credits)

An interdisciplinary survey of the major issues and challenges of the HIV pandemic. Such topics as the biology of the virus, therapeutic, clinical and epidemiological research developments, the social costs of sexual taboos and discrimination, and media and artistic representation by and of people with HIV are presented by faculty and visiting community experts. The epidemics in the Western hemisphere, Africa, Asia, and other regions are addressed. Learning is based on lectures, weekly tutorials, and community involvement.

**INTE 391 (also listed as FASS 391)
Issues in Sexuality Research**
(3 credits)

An interdisciplinary survey of approaches to research in sexuality within the humanities, the arts, and the social sciences. Basic concepts of sexual identity, values, conduct, representation, and politics are addressed through such topical concerns as pornography and censorship, and through the perennial dialogue between biological and socio-cultural models of sexuality. The relation between theories and research methods is discussed in the context of classical and current research and creative activity. The syllabus reflects the varying specializations of the instructors from year to year.

**INTE 392 (also listed as FASS 392)
Introduction to Queer Theory**
(3 credits)

An interdisciplinary survey of the basic post-1970 theories of sexual minorities and diversity, in their historical and cultural contexts. Authors from Michel Foucault to Eve Kosofsky Sedgwick are introduced, as well as the work of artists and performers from Derek Jarman to k.d. lang. The syllabus reflects the varying specializations of the instructors from year to year.

INTE 398 Special Topics (3 credits)

INTE 399 Special Topics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

**INTE 410 (also listed as LUCC 410)
The Works of Bernard
Lonergan** (3 credits)

This course engages students in the task of

integrating their specific fields of studies into the more general enterprise of human knowing and deciding. It reflects upon this experience with the aid of Bernard Lonergan's methodology. The texts are selected from the work of Lonergan.
NOTE: Students who have received credit for LUC 410 may not take this course for credit.

INTE 441 **(also listed as LUC 441)**
Issues in Contemporary Values
(3 credits)

This course addresses central questions concerning what we love or detest, embrace or reject, prescribe or proscribe; what resources of human being, e.g. philosophical, psychological, or artistic, are implicitly or explicitly drawn upon in these choices; whether the choices we make

are mere "preferences", or have objective status as values; and how these questions relate to the problems of our culture and our time. Through alternating emphases and faculty, the focus is changed from time to time.

NOTE: Students who have received credit for INTE 440, LUC 440 or 441 may not take this course for credit.

INTE 498 ***Special Topics*** (3 credits)

INTE 499 ***Special Topics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.180 JOURNALISM

<p><i>Faculty</i></p>	<p><i>Director</i> ENN RAUDSEPP, Associate Professor</p> <p><i>Diploma Program Director</i> LINDA KAY, Assistant Professor</p> <p><i>Faculty</i> ROSS PERIGOE, Associate Professor SHEILA ARNOPOULOS, Assistant Professor MICHAEL JOHN GASHER, Assistant Professor</p> <p><i>Lecturers</i> PETER DOWNIE MATTHEW FRIEDMAN</p> <p><i>Sessional Instructors</i> HUGH ANDERSON, Freelance Writer BOB BABINSKI, CBC TV Sportscaster MICHAEL J. BRANSWELL, Journalist, Canadian Press</p> <p>ANN CARROLL, Journalist, The Gazette PETER COONEY, New Media, The Gazette LEONARD GERVAIS, Editor, Tool Box MATTHEW HAYS, Editor, The Mirror KATHLEEN HUGESSEN, Freelance Writer JANET KASK, Freelance Journalist BARRY LAZAR, Independent Film Maker VALERIE LESAGE, Radio Canada TRUDIE MASON, Program Host, CJAD Radio KATHERINE SEDGWICK, Journalist, The Gazette ANDREA SHEPHERD, Pagination Systems Assistant, The Gazette MINKO SOTIRON, Writer and History Lecturer BERNARD ST-LAURENT, Journalist, CBC Radio News CAROLINE VAN VLAARDINGEN, Reporter, CFCF-TV News DAVID WATERS, Freelance Writer</p>
<p><i>Location</i></p>	<p>Loyola Campus Bryan Building, Room: BR 305-4 (514) 848-2465 E-Mail: conjour@vax2.concordia.ca</p>
<p><i>Department Objectives</i></p>	<p>Journalism studies are designed to help students become the intelligent and versatile reporters and writers upon which society depends for the exercise of its democratic functions. Above all, journalism is an intellectual activity with rigorous standards for gathering, processing, and disseminating information. To help students become knowledgeable and versatile reporters and writers, the Department of Journalism offers a professional education that combines theory and practice. Writing and production workshops emphasize the practical, simulating as much as possible the assignments of working journalists. Newsroom standards are universally applied. Complementing these courses are lectures and seminars which analyse the social and political contexts in which journalism is practised.</p>
<p><i>Admission and Graduation Requirements</i></p>	<p>Enrolment in the writing workshops in the Department of Journalism is limited and depends on the applicants' successful completion of the admission procedures outlined in the following paragraphs. All applicants should apply through the Office of the Registrar. In addition, they must submit a letter of intent and transcript to the Department of Journalism by March 1. The letter of intent sent to the Department should be about 500 words and should describe the student's academic and work background and aspirations in journalism. Applicants must also contact the Department by March 1 to make an appointment for a test of English proficiency. Although it will not determine acceptance, applicants are advised that a working knowledge of French is important. A student must achieve a final mark of "C" or better in the reporting workshops in order to proceed to the next level. To graduate with a Major or Specialization in Journalism, a student must demonstrate a working knowledge of French. Tests of oral and reading proficiency in French are administered by the Département d'études françaises on behalf of the Department of Journalism, which is responsible for the final evaluation of each student's competence.</p>
<p><i>Programs</i></p>	<p>Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value. These programs are designed to prepare graduates for the English-language media. Students interested in Broadcast Journalism are encouraged to take the Specialization in Journalism.</p> <p>60 BA Specialization in Journalism NOTE: This Specialization allows students the fullest range of journalism courses and is intended to prepare students to work in all forms of modern journalism: radio, television, newspapers,</p>

- magazines, and electronic publications.*
- 15 JOUR 201⁶, 202³, 203³, 205³
 - 3 JOUR 210³ or 215³
 - 15 JOUR 302³, 303³, 309³, 310³, 315³
 - 6 JOUR 330³, 336³
 - 12 JOUR 318³, 319³, 400³, 420³
 - 6 Chosen from JOUR 402³, 404³, 432³
 - 3 JOUR 343³ or 442³

60 BA Specialization in Communication and Journalism

NOTE: Students must meet the admission requirements of both the Departments of Communication Studies and Journalism.

Stage I

- 15 JOUR 201⁶, 203³, COMS 240³, 256³
- 3 Chosen from COMS 278³, 282³

Stages II & III

- 3 Chosen from JOUR 205³, 215³
- 12 JOUR 302³, 303³, 310³, 315³
- 6 Chosen from COMS 378⁶, 387⁶
- 3 JOUR 400³
- 3 Chosen from JOUR 318³, 330³, 336³, 402³, 404³
- 15 Chosen from Communication Clusters III and IV at the 300 or 400 level.

42 BA Major in Journalism

- 15 JOUR 201⁶, 202³, 203³, 205³
- 15 JOUR 302³, 303³, 309³, 310³, 315³
- 3 JOUR 400³
- 3 JOUR 402³ or 404³
- 3 JOUR 330³ or 336³
- 3 Chosen from JOUR 318³, 319³, 442³

Courses

Written work in writing and reporting workshop courses is in English; please consult the Department.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

JOUR 201 Writing and Reporting I
(6 credits)

Prerequisite: Enrolment in a Journalism program. This course gives training in basic reporting and news writing. Students practise writing news and receive out-of-classroom assignments.

JOUR 202 Introduction to Computer Applications in Journalism
(3 credits)

Prerequisite: JOUR 201 previously or concurrently. Students are introduced to the basics of computer-assisted reporting and desktop publishing.

JOUR 203 Introduction to Radio News
(3 credits)

Prerequisite: JOUR 201 previously or concurrently. Students learn to write for newscasts and for longer broadcast formats. There are field assignments in interviewing, tape editing, and preparation for broadcast.

NOTE: Students who have received credit for JOUR 306 may not take this course for credit.

JOUR 205 History of Journalism
(3 credits)

A history of the news media in the English-speaking world, starting with the government gazettes of seventeenth-century England and their illegal, underground competition, through the "news" papers of the eighteenth century, the rise of the yellow press, the human interest story, the penny press in the nineteenth century, down to today's corporate press. The course is designed to show that our expectations of the news media are not inherent in human nature, but are the result of historical processes that continue to evolve.

JOUR 210 The Media in Québec
(3 credits)

This course studies the special characteristics of Québec media, focusing particularly on the historical development of Québec journalism and the part it has played in the shaping of modern Québec. Particular attention is given to the influence of journalists in cultural and political affairs. The recent increasing concentration of media ownership is examined. Much of the reading material is in French.

NOTE: Students who have received credit for JOUR 305 may not take this course for credit.

JOUR 215 Contemporary News Media
(3 credits)

This course introduces students to the increasingly complex structures of modern media. It examines the organizations, practices, and problems of news media, focusing on key functions in their day-to-day activities. In any given year, it may explore in detail a particular development or problem in the news media.

JOUR 298 Special Topics in Journalism
(3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

JOUR 302 Reporting Methods (3 credits)

Prerequisite: JOUR 201. This course builds solid foundations for a variety of journalistic assignments: feature writing, background and in-depth reporting, analyses, and investigative reporting. It is designed to help students understand and master a variety of information-gathering techniques, and overcome some of the hurdles confronting the contemporary journalist. It covers: information sources, interpretation and

use of documents, access to information, and reporting and interviewing techniques to supplement official and conventional information sources.

JOUR 303 Feature Writing (3 credits)

Prerequisite: JOUR 302. This course is designed to help students develop and enhance their writing abilities, preparing for the broadest range of journalistic feature writing, from brief colour stories and profiles to in-depth articles. It consolidates interviewing techniques and introduces a variety of writing approaches. Students will be building the final foundations for a full spectrum of print-oriented writing assignments, preparing for advanced reporting work and the demands of specialized journalism.

JOUR 309 Principles of Editing (3 credits)

Prerequisite: JOUR 201. Through lectures and workshops, students are introduced to the art of story editing. While the material used is designed primarily for print production, the techniques, and particularly the intellectual processes employed, are applicable to all media.

NOTE: Students who have received credit for JOUR 410 may not take this course for credit.

JOUR 310 The Press and the Law
(3 credits)

Prerequisite: JOUR 201, or permission of the director. Lectures cover those aspects of criminal and civil law which bear most directly on the work of professional journalists — libel, slander, contempt of court.

NOTE: Students who have received credit for JOUR 405 may not take this course for credit.

JOUR 315 Ethics and Responsibility in Journalism (3 credits)

Prerequisite: JOUR 201, or permission of the director. This course considers journalism in the context of philosophical and ethical principles. It aims to assess realistically the responsibilities of reporting and news analysis and to examine critically the role of journalism in society.

NOTE: Students who have received credit for JOUR 446 may not take this course for credit.

JOUR 318 Publication Workshop (3 credits)

Prerequisite: JOUR 202. Students experiment, under supervision, with concepts and practical applications of computerized print media layout and design at an advanced level while creating publications in a variety of formats.

NOTE: Students who have received credit for JOUR 408 or 498H may not take this course for credit.

JOUR 319 Computer-Assisted Reporting
(3 credits)

Prerequisite: JOUR 202, or permission of the director. Students develop advanced skills in computer-assisted reporting, working with a variety of software and data storage systems to research, analyse and publish their work. The

goal is to equip students with the skills necessary to be successful journalists in the information age.

NOTE: Students who have received credit for JOUR 419 or 498J may not take this course for credit.

JOUR 330 Advanced Radio Journalism
(3 credits)

Prerequisite: JOUR 203 and permission of the Department. This workshop concentrates on the production of daily news for live broadcast.

Students function as reporters, assignment editors, and news readers. Critiques are given by the instructor and invited radio journalists.

NOTE: Students who have received credit for JOUR 430 may not take this course for credit.

JOUR 336 Television News (3 credits)

Prerequisite: JOUR 203. This course introduces students to the preparation of news for television. Classes and field assignments cover writing, interviewing, and editing of videotape for short television newscast items and for longer news feature formats.

NOTE: Students who have received credit for JOUR 415 may not take this course for credit.

JOUR 343 Broadcast Public Affairs
(3 credits)

Prerequisite: JOUR 201, or permission of the director. This course focuses on the principles, practices, and debates in Canadian public affairs radio and television. American broadcasting is also considered. The course also examines current affairs broadcasting in the world community.

NOTE: Students who have received credit for COMS 340, 342 or 343 may not take this course for credit.

JOUR 398 Special Topics in Journalism
(3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

JOUR 400 Advanced Reporting (3 credits)

Prerequisite: JOUR 303. Students are introduced to several areas of specialist reporting including business and editorial writing, and to a variety of journalistic treatments.

NOTE: Students who have received credit for JOUR 401 may not take this course for credit.

JOUR 402 Specialist Reporting (3 credits)

Prerequisite: JOUR 400. Students cover a beat in the field of their choice for several weeks, producing news, features, and background stories. A term-end major background story is also produced. There are seminars and discussions, with leaders from the media on the specifics of beat coverage and on general media topics, such as trade unionism, ethics, journalistic responsibility.

JOUR 404 Magazine Writing (3 credits)
Prerequisite: JOUR 400 and a qualifying assignment. This is a workshop for students who intend to write in the burgeoning magazine field. Students develop and apply the techniques used in a variety of magazine formats, from the highly specialized to the general: news magazines, special interest, topical or industrial publications, expansive feature formats, and internal corporate publications. It is of particular interest to students wishing a freelance career.

JOUR 420 Advanced Television Journalism (3 credits)
Prerequisite: JOUR 336 and permission of the Department. An advanced workshop in television journalism, working in the areas of news and current affairs programming. Emphasis on editorial control and journalistic treatment of subjects. Weekly critiques by professor and invited guests.

JOUR 428 On-line Magazine (3 credits)
Prerequisite: JOUR 318 or 319. This course introduces students to the theory and practice of on-line publication methods. Students design, lay out, and edit an on-line publication.
NOTE: Students who have received credit for this topic under a 498 number may not take this course for credit.

JOUR 432 Public Affairs Workshop in Broadcast Journalism (3 credits)
Prerequisite: JOUR 420 or 330. This workshop is intended for students in either radio or television who wish to perfect their skills in news magazine or long format public affairs broadcasting. Students propose their own story ideas and work independently under the guidance and supervision of the instructor.

JOUR 440 Seminar in Modern Journalism (3 credits)
Prerequisite: Third-year standing in a Journalism program. This course takes an intensive look at selected aspects of modern journalistic practice. The focus for this course may change from year to year.

JOUR 442 Seminar in International Journalism (3 credits)
Prerequisite: Third-year standing in a Journalism program. This course examines journalism and news media practices around the world. The focus of the course may change from year to year, to study in depth a selected country, or tradition.

JOUR 450 Independent Study (3 credits)
Prerequisite: Enrolment in a Journalism program. Students who have demonstrated ability may, near the end of their program, be allowed to undertake independent study, in either research or production, in an area of special interest in Journalism. The study or project is done in close collaboration with one or more members of the faculty.

JOUR 451 Independent Study (3 credits)
Prerequisite: Enrolment in a Journalism program. Students who have received credit for JOUR 450 may register for JOUR 451.

JOUR 498 Advanced Special Topics in Journalism (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.190

LIBRARY STUDIES

Faculty	Director JOANNE LOCKE, Associate Professor										
Location	Sir George Williams Campus J.W. McConnell Building, Room: LB 579 (514) 848-2528										
Department Objectives	<p>The overall objective of the Library Studies program is to provide strong undergraduate and graduate programs which prepare students for paraprofessional work in the field of library/ information studies and/or further study in other areas.</p> <p>The use of computers is integrated throughout the curriculum, and classes are scheduled in a variety of Concordia University Computing Centre labs including the MAC lab and the PC labs. For the majority of courses, students are required to use the Concordia University libraries extensively.</p> <p>Through its programs, Library Studies works to meet the needs of the library/information community by offering university-educated individuals for employment in the field, as paraprofessionals, thus filling the gap between the library clerk and the professional librarian.</p>										
Programs	<p>Beginning January 1, 1997, no new students will be admitted into Library Studies programs. Courses will continue to be scheduled to meet the needs of students in the programs.</p> <p>Students are required to complete the appropriate entrance profile for entry into the program (see §31.002 — Programs and Admission Requirements — Profiles).</p> <p><i>Students are responsible for satisfying their particular degree requirements.</i></p> <p><i>The superscript indicates credit value.</i></p> <table><tr><td>36 BA Major in Library Studies</td><td>60 Certificate in Library Studies</td></tr><tr><td>3 LIBS 205³</td><td>30 LIBS 205³, 303³, 305³, 320³, 322³, 323³, 350³, 355³, 410³, 495³</td></tr><tr><td>15 LIBS 303³, 305³, 320³, 322³, 323³</td><td>6 LIBS electives in consultation with the program adviser</td></tr><tr><td>12 LIBS 350³, 355³, 410³, 495³</td><td>24 Electives</td></tr><tr><td>6 LIBS electives in consultation with the program adviser</td><td></td></tr></table> <p><i>NOTE: All Library Studies students must take LIBS 205 as a prerequisite to all other Library Studies courses, the only exceptions being LIBS 411, 433 and 461.</i></p> <p>The Library Studies program offers a <i>Major in Library Studies</i> to those who wish to pursue a career in library work at a non-graduate level. For those interested in taking advanced studies in any subject area including library and/or information science/studies at the graduate level, consultation with an adviser at the beginning of the program is recommended.</p> <p>The Certificate in Library Studies is offered to meet the needs of students who may not wish to fulfil the requirements of an undergraduate degree. Sixty (60) credits are required to complete the Certificate program, 36 of which consist of Library Studies, with 24 credits of electives. Students may transfer into the Certificate program credits earned in an incomplete degree or Certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.</p> <p>Diploma in Library Studies</p> <p>The Department also offers a Diploma program for students who have completed their undergraduate degree in another field. Detailed information on the program is given in the School of Graduate Studies Calendar.</p>	36 BA Major in Library Studies	60 Certificate in Library Studies	3 LIBS 205 ³	30 LIBS 205 ³ , 303 ³ , 305 ³ , 320 ³ , 322 ³ , 323 ³ , 350 ³ , 355 ³ , 410 ³ , 495 ³	15 LIBS 303 ³ , 305 ³ , 320 ³ , 322 ³ , 323 ³	6 LIBS electives in consultation with the program adviser	12 LIBS 350 ³ , 355 ³ , 410 ³ , 495 ³	24 Electives	6 LIBS electives in consultation with the program adviser	
36 BA Major in Library Studies	60 Certificate in Library Studies										
3 LIBS 205 ³	30 LIBS 205 ³ , 303 ³ , 305 ³ , 320 ³ , 322 ³ , 323 ³ , 350 ³ , 355 ³ , 410 ³ , 495 ³										
15 LIBS 303 ³ , 305 ³ , 320 ³ , 322 ³ , 323 ³	6 LIBS electives in consultation with the program adviser										
12 LIBS 350 ³ , 355 ³ , 410 ³ , 495 ³	24 Electives										
6 LIBS electives in consultation with the program adviser											

Prerequisites To All Other Courses

LIBS 205 Introduction to Library Services (3 credits)

Required Courses

LIBS 303 Information Services (3 credits)

LIBS 305 Bibliographic Searching (3 credits)

LIBS 320 Cataloguing (3 credits)

LIBS 322	Subject Access and Classification I (3 credits)
LIBS 323	Subject Access and Classification II (3 credits)
LIBS 350	Automated Library Systems I (3 credits)
LIBS 355	Automated Library Systems II (3 credits)
LIBS 410	On-line Information Retrieval (3 credits)
Electives	
LIBS 298	Selected Topics in Library Studies (3 credits)
LIBS 299	Selected Topics in Library Studies (6 credits)
LIBS 398	Selected Topics in Library Studies (3 credits)
LIBS 399	Selected Topics in Library Studies (6 credits)
LIBS 407	Research Methodology (3 credits)
LIBS 409	Library Research and Library Resources in Science and Technology (3 credits)
LIBS 411	Library Service and Work with Children (3 credits)
LIBS 421	School Library Services, Collections and Programs (3 credits)
LIBS 432	Library Service and Work in the College and University (3 credits)
LIBS 433	Technical Skills in Multi-Media Operations (3 credits)
LIBS 435	Organization of Audio-Visual Collections (3 credits)
LIBS 441	Library Service and Work in Business and Industry (3 credits)
LIBS 451	Library Service and Work in the Public Library (3 credits)
LIBS 461	Library Service and Work with the Young Adult (3 credits)
LIBS 498	Advanced Topics in Library Studies (3 credits)
LIBS 499	Advanced Topics in Library Studies (6 credits)

Final Required Course

LIBS 495 Field Practice (3 credits)

Electives Open to Non-Library Studies Students Only

INST 250 Introduction to Library Research Practices (3 credits)

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

LIBS 303 **Information Services** (3 credits)
Prerequisite: LIBS 205. This course examines the theories and principles of information services and literature searching. Standard general reference works are studied.

LIBS 305 **Bibliographic Searching** (3 credits)
Prerequisite: LIBS 205. This course examines the theories and principles of reference work and provides a broad introduction to bibliographic searching. General and subject bibliographies, indexes and abstracts are examined and evaluated.

LIBS 322 **Subject Access and Classification I** (3 credits)
Prerequisite: LIBS 320. This course is designed to give the student, who is knowledgeable concerning descriptive cataloguing and MARC format, a basic knowledge of subject cataloguing and classification. Emphasis is placed on Sears List of Subject Headings and the Dewey Decimal Classification Scheme.
NOTE: Students who have received credit for LIBS 324 may not take this course for credit.

LIBS 323 **Subject Access and Classification II** (3 credits)
Prerequisite: LIBS 320. This course is designed to give the student, who is knowledgeable concerning descriptive cataloguing and MARC

format, a basic knowledge of subject cataloguing and classification. Emphasis is placed on the Library of Congress Subject Headings and the Library of Congress Classification Scheme.
NOTE: Students who have received credit for LIBS 324 may not take this course for credit.

LIBS 398 **Selected Topics in Library Studies** (3 credits)

LIBS 399 **Selected Topics in Library Studies** (6 credits)

Specific topics for these courses will be stated in the Undergraduate Class Schedule. Prerequisites relevant in each case to be discussed with the academic adviser.

LIBS 409 **Library Research and Library Resources in Science and Technology** (3 credits)

Prerequisite: LIBS 205; or enrolment in Engineering or in a Major in Science. The course is designed to introduce Science and Engineering undergraduates, as well as the Library Studies student, to the structure of scientific literature, to the basic types of information sources in science and technology, and to information networks, and computer-based retrieval systems. The student also becomes familiar with search strategies and

indexing techniques. Emphasis is placed on developing skills in the student's particular discipline or interest.

LIBS 410 *On-line Information Retrieval*
(3 credits)

Prerequisite: LIBS 305. A theoretical and practical introduction to the operation and use of on-line information retrieval systems. Emphasis is on database file structure, search protocol, Boolean logic, vocabulary control, and search strategy development in relation to searching bibliographic and full text databases.

LIBS 411 *Library Service and Work with Children* (3 credits)

The course is designed to introduce the student to the major genres of children's literature. The student examines the methods used in the library to stimulate the child's love of reading and evaluates children's literature through assignments, films, and a field trip to a children's library.

LIBS 421 *School Library Services, Collections and Programs*
(3 credits)

Prerequisite: LIBS 205. The duties and responsibilities of the library assistant, library technician and teacher-librarian are discussed. Topics include programs for teaching the use of the library, methods for cooperating with teachers, the assembling of materials for instructional units, responding to curriculum

demands upon the library, and examining the effects of new curriculum trends in education upon the school library/resource centre.

LIBS 461 *Library Service and Work with the Young Adult* (3 credits)

This course explores through books the major phenomena of the teenager's world. Some of the skills needed to serve young adults in a library setting are examined. Literature written especially for young adults, and some adult literature which is especially popular with, and suitable for, young people, is studied. A pre-course reading list is available.

LIBS 495 *Field Practice* (3 credits)

Prerequisite: Completion of all other required Library Studies courses. In consultation with the appropriate supervising librarian, the student is placed in a local library system other than the library in which the student is employed. The duration of the field practice is five weeks. Field practice includes a wide variety of library tasks. In addition the student is required to complete a written research project on a topic approved by the professor.

LIBS 498 *Advanced Topics in Library Studies* (3 credits)

Specific topics for these courses will be stated in the Undergraduate Class Schedule. Prerequisites relevant in each case to be discussed with the academic adviser.

31.200 MATHEMATICS AND STATISTICS

<i>Faculty</i>	<i>Chair</i> JOEL HILLEL, <i>Professor</i>	<i>Professor of Mathematics and Computer Science</i> JOHN McKAY
	<i>Professors</i> SYED T. ALI ABRAHAM J. BOYARSKY WILLIAM P. BYERS YOGENDRA P. CHAUBEY PAWEL GORA RICHARD L. HALL JOHN HARNAD ZOHEL KHALIL HERSHY KISILEVSKY HARALD W. PROPPE ROBERT RAPHAEL ANNA SIERPINSKA TARIQ N. SRIVASTAVA RONALD J. STERN MANFRED E. SZABO FRANCISCO THAINE-PRADA	<i>Associate Professors</i> JOSEF BRODY G. ELIE COHEN CHRISTOPHER J. CUMMINS CHANTAL DAVID JOSÉ GARRIDO JAMES C. HAYES ATTILA KEVICZKY <i>Assistant Professors</i> ANGELO J. CANTY GALIA DAFNI VINCENT GOULET DMITRI KOROTKIN
<i>Location</i>	<i>Loyola Campus</i> Hingston Hall B, Room: HB 234 (514) 848-3232	<i>Sir George Williams Campus</i> J.W. McConnell Building, Room: LB 525 (514) 848-3223
<i>Department Objectives</i>	<p>The Department of Mathematics and Statistics provides the general mathematical culture necessary for training those who will either be using the tools of mathematics or statistics in their work or who will become future mathematicians or statisticians. For students who are contemplating graduate work in mathematics or statistics, the Department has leading researchers in the fields of Actuarial Mathematics, Applied Probability, Computational Algebra, Differential Geometry, Dynamical Systems, Mathematical Physics, Mathematics Education, Number Theory and Statistics.</p> <p>In addition to its co-op program, alternating Work and Academic terms, the Department offers a program in Actuarial Mathematics and prepares students for the associateship examinations of the Society of Actuaries and the Casualty Actuarial Society.</p> <p>The Department also provides instruction at the remedial and introductory levels to enable students who have been out of school for some time to re-enter the academic stream; and offers special courses for teachers of mathematics who wish to keep abreast of recent ideas and applications.</p>	
<i>Programs</i>	<p>Students are required to complete the appropriate entrance profile for entry into the program (see §31.002 — Programs and Admission Requirements — Profiles).</p> <p>A student wishing to follow a program in the Department of Mathematics and Statistics but not meeting the entrance requirements should consult with one of the Department's academic advisers. By careful choice of electives, students can select whether the emphasis of the program will be in the area of Actuarial Mathematics, Pure and Applied Mathematics, or Statistics through Specialization/Honours programs in the respective areas.</p> <p>The enrolment in Specialization/Honours will be on a selective basis, whereas the Major will be open to all students. However, students with less than a 70% average in cégep Mathematics courses will be required to take a six-credit "transition" Calculus and Linear Algebra course (MAST 214) upon entry into the MATH/STAT Major. The course will not count for credits in the Major.</p> <p>Students in a Mathematics and Statistics program may not take any of the following courses for credit: EMAT 212, 232, 252, 271. Students wishing to take other Engineering Mathematics courses for credit must obtain prior approval of the Department.</p>	

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

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| <p>66 BA or BSc Honours in Actuarial Mathematics</p> <p>27 MATH 251³, 252³, 264³, 265³, 354³, 364³, 365³; STAT 249³, 250³</p> <p>30 ACTU 256³, 257³, 357³, 457³, 458³, 459³, STAT 349³, 360³, 460³, 461³</p> <p>3 Chosen from ACTU 286¹, 386², 486²; MAST 232³, 332³; STAT 287¹, 388²</p> <p>6 Honours project ACTU 493</p> <p>60 BA or BSc Specialization in Actuarial Mathematics</p> <p>27 MATH 251³, 252³, 264³, 265³, 354³, 364³, 365³; STAT 249³, 250³</p> <p>30 ACTU 256³, 257³, 357³, 457³, 458³, 459³, STAT 349³, 360³, 460³, 461³</p> <p>3 Chosen from ACTU 286¹, 386², 486²; MAST 232³, 332³; STAT 287¹, 388²</p> <p>66 BA or BSc Honours in Pure and Applied Mathematics</p> <p>30 MATH 251³, 252³, 264³, 265³, 354³, 361³, 364³, 365³; STAT 249³, 250³</p> <p>12 MATH 366³, 369³, 464³, 467³</p> <p>6 Chosen from MATH 470³, 471³, 474³, 475³, 478³, 479³; STAT 449³, 452³</p> <p>3 Chosen from MAST 232³, 332³; STAT 287¹, 388²</p> <p>9 MATH/STAT chosen with prior departmental approval</p> <p>6 Honours project MATH 496</p> <p>60 BA or BSc Specialization in Pure and Applied Mathematics</p> <p>30 MATH 251³, 252³, 264³, 265³, 354³, 361³, 364³, 365³; STAT 249³, 250³</p> <p>12 MATH 366³, 369³, 464³, 467³</p> <p>6 Chosen from MATH 470³, 471³, 474³, 475³, 478³, 479³; STAT 449³, 452³</p> <p>3 Chosen from MAST 232³, 332³; STAT 287¹, 388²</p> <p>9 MATH/STAT chosen with prior departmental approval</p> | <p>66 BA or BSc Honours in Statistics</p> <p>30 MATH 251³, 252³, 264³, 265³, 354³, 361³, 364³, 365³; STAT 249³, 250³</p> <p>12 MATH 366³; STAT 349³, 360³, 450³</p> <p>6 Chosen from MATH 464³, 467³, 478³, 479³; STAT 449³, 452³, 460³, 461³, 480³</p> <p>3 Chosen from MAST 232³, 332³; STAT 287¹, 388²</p> <p>9 MATH/STAT chosen with prior departmental approval</p> <p>6 Honours project STAT 499</p> <p>60 BA or BSc Specialization in Statistics</p> <p>30 MATH 251³, 252³, 264³, 265³, 354³, 361³, 364³, 365³; STAT 249³, 250³</p> <p>12 MATH 366³; STAT 349³, 360³, 450³</p> <p>6 Chosen from MATH 464³, 467³, 478³, 479³; STAT 449³, 452³, 460³, 461³, 480³</p> <p>3 Chosen from MAST 232³, 332³; STAT 287¹, 388²</p> <p>9 MATH/STAT chosen with prior departmental approval</p> <p>42 BA or BSc Major in Mathematics and Statistics</p> <p>36 COMP 248³; MAST 217³ or COMP 238³; MAST 218³, 219³, 221³, 223³, 224³, 232³, 234³, 235³, 331³, 332³</p> <p>3 Chosen from MAST 333³, 334³, 335³, 397³, 398³; MATH 370³</p> <p>3 Chosen with prior departmental approval*</p> <p><i>*NOTE: This category may also include any other courses in the ACTU/MATH/STAT discipline, with proper prerequisites.</i></p> <p>24 Minor in Mathematics and Statistics</p> <p>18 MAST 217³, 218³, 219³, 221³, 223³, 224³</p> <p>6 MATH/STAT chosen with prior departmental approval from MAST 234³, 235³, 330³, 331³, 332³, 333³, 334³, 335³, 397³, 398³</p> |
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MATHEMATICS AND STATISTICS CO-OPERATIVE PROGRAM

Mathematics and
Statistics
Co-operative
Program

Director
MANFRED E. SZABO, Professor

The Mathematics and Statistics Co-operative program is offered to students who are enrolled in the BA or BSc Honours or Specialization programs. Students interested in applying for the Mathematics and Statistics co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular program, but six Study terms are interspersed with four Work terms.

Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Mathematics and Statistics co-op committee, which includes the student's advisers.

Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Actuarial Mathematics

ACTU 256 *Mathematics of Finance* (3 credits)

Prerequisite: MATH 264 previously or concurrently; and permission of the Department. Measurement of interest; annuities and perpetuities; amortization and sinking funds; rates of return; bonds and related securities; life insurance.

NOTE: Students who have received credit for MATH 326 may not take this course for credit.
NOTE: Only three credits will be awarded from ACTU 256; MAST 335.

ACTU 257 *Actuarial Mathematics I* (3 credits)

Prerequisite: ACTU 256. Measurement of mortality; survival function, mortality tables, force of mortality; special topics.

NOTE: Students who have received credit for MATH 327 may not take this course for credit.

ACTU 286 *Actuarial Mathematics Lab I* (1 credit)

This lab will feature problem-solving sessions for the Mathematical Foundations of Actuarial Science examination of the Society of Actuaries and the Casualty Actuarial Society.

NOTE: Students who have received credit for MATH 229 may not take this course for credit.

ACTU 357 *Actuarial Mathematics II* (3 credits)

Prerequisite: ACTU 257. Life annuities; pure endowments, annual payments, continuous annuities, net annual premium, net level premium reserves; the expense factor; special topics.

NOTE: Students who have received credit for MATH 427 may not take this course for credit.

ACTU 386 *Actuarial Mathematics Lab II* (2 credits)

This lab will feature the use of programming languages and software applications.

NOTE: Students who have received credit for MATH 232 may not take this course for credit.

ACTU 456 *Pension Mathematics* (3 credits)

Prerequisite: ACTU 357. Valuation methods; gains and losses; dynamic control; special topics.

ACTU 457 *Risk Theory* (3 credits)
Prerequisite: ACTU 257. Applications of contingency theory in life and health insurance, annuities and pension; individual risk theory, ruin theory.

NOTE: Students who have received credit for MATH 428 may not take this course for credit.

ACTU 458 *Credibility Theory* (3 credits)
Prerequisite: ACTU 457; STAT 349 previously or concurrently. Credibility approach to inference

for heterogeneous data; classical, regression and Bayesian models; illustrations with insurance data.

ACTU 459 *Loss Distributions* (3 credits)
Prerequisite: ACTU 457; STAT 360. Probability model fitting to loss data; estimation and testing under variety of procedures and sampling designs.

ACTU 486 *Actuarial Mathematics Lab III* (2 credits)

This lab will be a workshop designed to prepare students for the Actuarial Models examination of the Society of Actuaries and the Casualty Actuarial Society.

NOTE: Students who have received credit for MATH 429 may not take this course for credit.

ACTU 491 *Topics in Actuarial Mathematics* (3 credits)

ACTU 492 *Reading Course in Actuarial Mathematics* (3 credits)

ACTU 493 *Honours Project in Actuarial Mathematics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Mathematics and Statistics

MAST 214 *Calculus and Linear Algebra* (6 credits)

Prerequisite: Cégep Mathematics 105, 203. Functions; maxima and minima. Velocity and acceleration. Iterative solution of equations, parametric equation of curves. Integrals; change of variables, integration by parts, double integrals, numerical integration. Conic sections. Matrices, determinants, eigenvalues, eigenvectors, system of equations. Series and their convergence. Introduction to vector space and complex numbers. Word problems.

NOTE: This course can be counted as an elective towards a 90-credit degree program. It must be taken, upon entry, by newly admitted students in the MATH/STAT Major who have less than 70% average in cégep Mathematics courses.

MAST 217 *Introduction to Mathematical Thinking* (3 credits)

This course aims to foster analytical thinking through a problem-solving approach. Topics include construction of proofs, number systems, ordinality and cardinality, role of examples and counter examples, role of generalizations and specializations; role of symbols, notations and definitions; styles of mathematical discourse.

NOTE: Students who have received credit for

MATH 216 may not take this course for credit.
NOTE: Only three credits will be awarded from MAST 217; COMP 238.

NOTE: This course cannot be taken for credit by students in the Specialization/Honours stream.

NOTE: Students with more than 12 credits in post-cégep Mathematics may not take this course for credit.

MAST 218 Multivariable Calculus I
(3 credits)

Prerequisite: Cégep Mathematics 105, 203 or equivalent. Vector geometry; lines and planes; curves in \mathbb{R}^n ; vector functions; vector differential calculus; extrema and Lagrange multipliers. Introduction to multiple integrals and coordinate transformations. Problem solving with MAPLE.

NOTE: Students who have received credit for MATH 262 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 218; MATH 264.

MAST 219 Multivariable Calculus II
(3 credits)

Prerequisite: MAST 218 or equivalent. Vector integral calculus; line and surface integrals; Green's, Stokes' and Gauss' theorems; coordinate transformations and Jacobians. Power series, applications. Problem solving with MAPLE.

NOTE: Students who have received credit for MATH 263 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 219; MATH 265.

MAST 221 Applied Probability (3 credits)

Prerequisite: Cégep Mathematics 105, 203 or equivalent. Counting rules, discrete probability distributions; random sampling; conditional probability; means and variances, normal and other continuous sampling distributions.

Applications. Use of MINITAB and/or SYSTAT.

NOTE: Students who have received credit for MATH 242 may not take this course for credit.

**MAST 223 Introduction to Stochastic
Methods of Operations
Research** (3 credits)

Prerequisite: MAST 221 or equivalent. Markov chains; queuing theory; inventory theory; Markov decision processes; applications to reliability.

NOTE: Students who have received credit for MATH 337 may not take this course for credit.

MAST 224 Introduction to Optimization
(3 credits)

Prerequisite: Cégep Mathematics 105, 203 or equivalent. Introduction to the theory of optimization; linear programming; the simplex method; duality and transportation problem. Introduction to graphs and networks; applications. Use of computing softwares.

NOTE: Students who have received credit for MATH 231 may not take this course for credit.

**MAST 232 Mathematics with Computer
Algebra** (3 credits)

Prerequisite: Cégep Mathematics 105, 203 or

equivalent. An introduction to the use of a high-level mathematical programming language (MAPLE or MATHEMATICA) as a practical aid in doing mathematics. Most classes are given in an interactive way in the computer laboratory.

The emphasis is on applications, not on general programming techniques or abstract structures.

The aim is to arrive at a sufficient working familiarity with the computer algebra language to permit its regular use in subsequent studies and applications. The commands and online resources are introduced through a review of arithmetic, complex numbers, algebra, Euclidean geometry, trigonometry, coordinate systems and graphing, elementary functions and transformations, series, derivatives, integrals, vectors and matrices. There may be additional topics from domains such as number theory, differential equations, integral transforms, probability and statistics.

**MAST 234 Linear Algebra and
Applications I** (3 credits)

Prerequisite: Cégep Mathematics 105 or equivalent; MAST 217 previously or concurrently.

System of linear equations, matrix operations, echelon forms and LU-factorization; \mathbb{R}^n : subspaces, linear dependence, basis, dimension, matrix transformations; eigenvalues and eigenvectors in \mathbb{R}^n and applications (e.g. Markov chains, dynamical systems). The software MAPLE will be extensively used.

NOTE: Students who have received credit for MATH 251, 282 or ECON 325 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 234; MATH 251.

**MAST 235 Linear Algebra and
Applications II** (3 credits)

Prerequisite: MAST 234 or equivalent. \mathbb{R}^n : Orthogonality, projections, Gram-Schmidt method and QR-factorization; applications to least square methods (data fitting, inconsistent systems). Symmetric matrices, principal axes theorem and applications. Special topics (e.g. coding theory, differential equations, error analysis). The software MAPLE will be extensively used.

NOTE: Students who have received credit for MATH 252 or 283 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 235; MATH 252.

MAST 330 Differential Equations
(3 credits)

Prerequisite: MAST 218 or equivalent. First order differential equations; second order differential equations; Laplace transform methods; mathematical models and numerical methods.

NOTE: Students who have received credit for MATH 271 may not take this course for credit.

MAST 331 Mathematical Modelling
(3 credits)

Prerequisite: MAST 221, 224 previously or con-

currently, 234, 330 or equivalent. Introduction to mathematical modelling; predator-prey models in biology, game theory, decision analysis, stability theory; modelling electric circuits.

MAST 332 *Techniques in Symbolic Computation* (3 credits)

Prerequisite: MAST 217 or COMP 238 or equivalent; COMP 248 or equivalent. This course is an application-oriented introduction to symbolic computation, as it applies to algebra, number theory and combinatorics covering the following topics: capabilities of symbolic systems (e.g. MAPLE), modular methods, arithmetic mod p , arithmetic mod m , matrices mod p , Chinese remainder theorem, polynomial factorization mod p . Applications to coding theory and cryptography. Combinatorial algorithms.

NOTE: Students who have received credit for MATH 232 or COMP 367 or 467 may not take this course for credit.

MAST 333 *Applied Statistics* (3 credits)

Prerequisite: MAST 221 or equivalent. Graphical and numerical descriptive methods; Estimation and hypothesis testing; linear regression and correlation; one way ANOVA; contingency and goodness of fit tests. Use of statistical software, e.g. MINITAB or SYSTAT.

NOTE: Students who have received credit for MATH 243 may not take this course for credit.

MAST 334 *Numerical Analysis* (3 credits)

Prerequisite: MAST 218 or equivalent; MAST 235 previously or concurrently; MAST 332 or equivalent. Introduction to computing softwares; numerical solution of non-linear equations; interpolations and approximations; quadrature and numerical integration.

NOTE: Students who have received credit for MATH 311 may not take this course for credit.

MAST 335 *Investment Mathematics* (3 credits)

Prerequisite: MAST 218 or equivalent. Simple and compound interest; annuities; amortization and sinking funds; mortgage schemes; bonds and related securities; capital cost and depletion; spread-sheet implementation.

NOTE: Students who have received credit for MATH 326 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 335; ACTU 256.

MAST 397 *Topics in Mathematics and Statistics* (3 credits)

MAST 398 *Reading Course in Mathematics and Statistics* (3 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Mathematics

MATH 200 *Fundamental Concepts of Algebra* (3 credits)

This course is designed to give students the background necessary for MATH 201. Some previous exposure to algebra is assumed. Sets, algebraic techniques, inequalities, graphs of equations.

NOTE: Students who have received credit or exemption for MATH 201 or 206 or equivalent may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 201 *Elementary Functions* (3 credits)

Sets, inequalities, graphs of functions, and relations. Trigonometric, exponential, and logarithmic functions. Lectures and laboratory.

NOTE: Students who have received credit or exemption for MATH 203 or equivalent, or for a course having MATH 203 or equivalent in its sequence of prerequisites, may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 202 *College Algebra* (3 credits)

Prerequisite: MATH 201 or equivalent. Progressions, combinations, permutations, binomial theorem, mathematical induction, inequalities, polynomials, cartesian and polar forms of complex numbers, conics.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 203 *Differential and Integral Calculus I* (3 credits)

Prerequisite: MATH 201 or equivalent. Functional notation. Differentiation of polynomials. The power, product, quotient, and chain rules. Differentiation of elementary functions. Implicit differentiation. Higher derivatives. Maxima and minima. Applications: tangents to plane curves, graphing, related rates. Approximations using the differential. Antiderivatives, definite integrals, area. Lectures and laboratory.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 204 *Vectors and Matrices* (3 credits)

Prerequisite: MATH 201 or equivalent. Algebra and geometry of vectors, dot and cross products, lines and planes. System of equations, operations on matrices, rank, inverse, quadratic form, and rotation of axes.

NOTE: Students in programs leading to the BSc

degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 205 *Differential and Integral Calculus II* (3 credits)

Prerequisite: MATH 203. Techniques of integration: substitutions, integration by parts, partial fractions. Improper integrals. Physical applications of the definite integral. Infinite series: tests for convergence. Power series, Taylor's theorem. Lectures and laboratory.
NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 206 *Algebra and Functions* (3 credits)

Coordinate systems. Radicals and distance formula. Polynomials, factoring, and graphing. Relations and functions. Linear and quadratic functions, equations, and systems. Exponents, exponential and logarithmic functions and equations.
NOTE: Students who have received credit or exemption for a course at the level of MATH 201 or above may not take this course for credit.
NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 208 *Fundamental Mathematics I* (3 credits)

Prerequisite: MATH 206 or equivalent. This course is a prerequisite course for Commerce and Administration students*. Matrices, Gaussian elimination, input-output analysis, progressions, compound interest, annuities, permutations and combinations, probability, binomial theorem, exponential and logarithmic functions, inequalities, linear programming.
**NOTE: See §14.4.2 (Mature Entry) and 61.20 (Extended Credit).*
NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 209 *Fundamental Mathematics II* (3 credits)

Prerequisite: MATH 206 or equivalent. This course is a prerequisite course for Commerce and Administration students*. Limits; differentiation of rational, exponential, and logarithmic functions; theory of maxima and minima; integration.
**NOTE: See §14.4.2 (Mature Entry) and 61.20 (Extended Credit).*
NOTE: Students who have received credit or exemption for MATH 203 or equivalent may not take this course for credit.
NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 211 was offered in 1996-97. For a description of this course, please see the 1996-97 Undergraduate Calendar.

MATH 215 *Ideas in Mathematics* (3 credits)

Mathematical ideas and techniques permeate Western civilization, but because mathematics operates at a high level of abstraction and uses an esoteric language, its contribution is not well understood. Avoiding mathematical technicalities as much as possible, this course attempts to demonstrate a few of the powerful ideas that have animated the development of mathematics. Examples of mathematical thinking from various periods of mathematical history are examined and related to their scientific and social impact.
NOTE: This course is designed as a suitable elective for students following an undergraduate program. It has no formal prerequisites and will not qualify students to enrol for any other Mathematics course, and cannot be used to satisfy a Mathematics requirement in any BSc or BA program.
NOTE: Students who have received credit for INTE 215 may not take this course for credit.

MATH 220 *Mathematical Methods in Chemistry* (3 credits)

Prerequisite: Cégep Mathematics 203 or MATH 205. Partial derivatives. First-order differential equations (first- and second-order chemical reactions). Hermite, Laguerre, and Legendre equations. Solutions by power series. Eigenfunctions and eigenvalues, Sturm-Liouville theory.

MATH 244 *Analysis I* (3 credits)

Prerequisite: Cégep Mathematics 105, 203 or equivalent. Mathematical rigour: proofs and counter-examples; quantifiers; number systems; Cardinality, decimal representation, density of the rationals, least upper bound. Sequences and series; review of functions, limits and continuity.
NOTE: Students who have received credit for MATH 362 may not take this course for credit.

MATH 245 *Analysis II* (3 credits)

Prerequisite: MATH 244 or equivalent. Connectedness and compactness in the reals. Intermediate value theorem; extreme values for continuous functions. Differential and integral calculus; fundamental theorem of calculus; power series.
NOTE: Students who have received credit for MATH 363 may not take this course for credit.

MATH 251 *Linear Algebra I* (3 credits)

Prerequisite: Cégep Mathematics 105, 203 or equivalent. Matrices and linear equations; vector spaces; bases, dimension and rank; linear mappings and algebra of linear operators; matrix representation of linear operators; determinants; eigenvalues and eigenvectors; diagonalization.
NOTE: Students who have received credit for

MAST 234, MATH 282 or ECON 325 may not take this course for credit.
 NOTE: Only three credits will be awarded from MATH 251; MAST 234.

MATH 252 Linear Algebra II (3 credits)
 Prerequisite: MATH 251 or equivalent. Characteristic and minimum polynomials; invariant subspaces, invariant direct sums; nilpotent operators, Jordan canonical form; cyclic subspaces; rational canonical form; bilinear and quadratic forms; inner product; orthogonality; adjoint operators and orthogonal operators.
 NOTE: Students who have received credit for MAST 235 or MATH 283 may not take this course for credit.
 NOTE: Only three credits will be awarded from MATH 252; MAST 235.

MATH 264 Advanced Calculus I (3 credits)
 Prerequisite: Cégep Mathematics 105, 203 or equivalent. Introduction to limits and continuity in \mathbb{R}^n . Multivariate calculus: the derivative as a linear approximation; matrix representation of derivatives; tangent spaces; gradients, extrema, including Lagrange multipliers, Taylor's formula and the classification of critical points.
 NOTE: Students who have received credit for MATH 262 or 344 may not take this course for credit.
 NOTE: Only three credits will be awarded from MATH 264; MAST 218.

MATH 265 Advanced Calculus II (3 credits)
 Prerequisite: MATH 264 or equivalent. Implicit functions and the implicit function theorem. Multiple integrals and change of variables. Curves, surfaces and vector calculus.
 NOTE: Students who have received credit for MATH 263 or 345 may not take this course for credit.
 NOTE: Only three credits will be awarded from MATH 265; MAST 219.

MATH 334 Combinatorics (3 credits)
 Prerequisite: Eighteen credits in post-cégep Mathematics. General principle of counting, permutations, combinations, identities, generating functions; Fibonacci numbers; partitions, recurrence relations, Stirling numbers, Catalan numbers, principle of inclusion-exclusion, cycles of a permutation, orbits of permutation groups, parity of a permutation, Polya's theorem.

MATH 352 Linear Algebra III (3 credits)
 Prerequisite: MATH 252. Matrices, linear transformations, determinants, metric concepts, inner-product spaces, dual spaces, spectral theorem, bilinear and quadratic forms, canonical forms for linear transformation, matrix functions, selected topics.
 NOTE: Students who have received credit for MATH 381 may not take this course for credit.

MATH 354 Numerical Analysis (3 credits)
 Prerequisite: MATH 245; MATH 387 or equivalent, previously or concurrently. Error analysis

in numerical algorithms; solution of non-linear equations; fixed point iterations, rate of convergence. Interpolations and approximations, Legendre polynomials. Numerical integration and quadrature.
 NOTE: Students who have received credit for MATH 311 may not take this course for credit.

MATH 361 Operations Research I (3 credits)

Prerequisite: MATH 251 or equivalent. Introduction to the theory of optimization; linear programming, simplex method; revised simplex method; transport and assignment problems; integer programming; introduction to graphs and networks.
 NOTE: Students who have received credit for MATH 231 may not take this course for credit.

MATH 366 Complex Analysis I (3 credits)
 Prerequisite: MATH 264 or equivalent. Algebra and geometry of complex numbers, linear transformations, analytic functions, Laurent's series, calculus of residues, special functions.

MATH 369 Abstract Algebra I (3 credits)
 Prerequisite: Twelve credits in post-cégep Mathematics or permission of the Department. Introduction to the ring of integers and the integers modulo N . Groups: definitions and examples; subgroups, quotients and homomorphisms (including Lagrange's theorem, Cayley's theorem and the isomorphism theorems). Introduction to the Cauchy and Sylow theorems and applications.
 NOTE: Students who have received credit for MATH 393 may not take this course for credit.

MATH 370 Ordinary Differential Equations (3 credits)

Prerequisite: MATH 245, 252, or equivalent. Separable equations, exact equations, integrating factors, force fields, first order linear equations, input-output concept, second order equations, Sturm-Liouville problems, applications, series solutions, reduction of order, variation of parameters, n th-order linear equations with constant coefficients, Laplace transforms, block diagrams, and signal-flow graphs.
 NOTE: Students who have received credit for MATH 271 or MAST 330 may not take this course for credit.

MATH 371 Partial Differential Equations (3 credits)

Prerequisite: MATH 370 or equivalent. Canonical forms for second order linear equations with constant coefficients, classification of linear second order equations, method of separation of variables, first order PDE's, method of characteristics. Non-linear first order equations, complete integrals, Cauchy conditions, Cauchy-Kowalewski theorem, Fourier and Laplace transforms, Green's functions, integral representations, introduction to non-linear PDE's.

MATH 380 Differential Geometry (3 credits)

Prerequisite: MATH 245, 252, 370. Calculus on

Euclidian spaces, tangent vectors, directional derivatives, differential forms, mappings, curves, frame fields, Serret-Frenet formulae, covariant derivatives; calculus on a surface, tangent spaces, differential forms on a surface, mappings between surfaces, integration of forms, Stokes' theorem.

MATH 387 Mathematics Lab III (2 credits)

This lab will demonstrate the use of MAPLE software for Calculus, Linear Algebra, and Statistics.

NOTE: Students who have received credit for MATH 232 may not take this course for credit.

MATH 392 Elementary Number Theory (3 credits)

Prerequisite: Eighteen credits in post-cégep Mathematics. Number systems, division and factorization, number-theoretic functions, congruences, algebraic congruences and primitive roots, quadratic residues, diophantine equations.

MATH 397 History of Mathematics (3 credits)

Prerequisite: MATH 245; MATH 252, or permission of the Department. Early mathematics, Greek mathematics, European mathematics in the Middle Ages, the origin and development of analytic geometry and calculus, mathematics as free creation, the generality of mathematics in the twentieth century.

MATH 433 Calculus of Variations (3 credits)

Prerequisite: MATH 245, 265, 370 or equivalent. Nature of problems, weak variations, the first variation, Euler's equation. The second variation, Jacobi's equation, Legendre's test, conjugate points. Relative maxima and minima, iso-perimetrical problems. Integrals with variable end points. Applications to problems in pure and applied mathematics; the principle of least action. Strong variations, the Weierstrass E-function.

MATH 464 Real Analysis (3 credits)

Prerequisite: MATH 245, 265 or equivalent. Metric spaces; function spaces; compactness, completeness, fixed-point theorems, Ascoli-Arzelà theorem, Weierstrass approximation theorem.

MATH 466 Complex Analysis II (3 credits)

Prerequisite: MATH 245, 265, 366 or equivalent. Cauchy's theorem, singularities, maximum modulus principle, uniqueness theorem, normal families, Riemann mapping theorem.

MATH 467 Measure Theory (3 credits)

Prerequisite: MATH 245, 265 and 464 previously or concurrently, or equivalent. Lebesgue measure and integration on the real line, convergence theorems, absolute continuity, completeness of $L^2[0,1]$.

MATH 470 Abstract Algebra II (3 credits)

Prerequisite: MATH 369 or equivalent. Group action and proof of the Sylow theorems.

Introduction to rings, ideals, euclidean domains, principal ideal domains and unique factorization domains; polynomial rings.

NOTE: Students who have received credit for MATH 394 may not take this course for credit.

MATH 471 Abstract Algebra III (3 credits)

Prerequisite: MATH 470 or equivalent. Rings and modules; structure theorem of modules over principal ideal domains. Noetherian rings and modules (including Hilbert basis theorem for rings and modules). Hilbert's Nullstellensatz.

NOTE: Students who have received credit for MATH 491 may not take this course for credit.

MATH 472 Abstract Algebra IV (3 credits)

Prerequisite: MATH 470 or equivalent. Elements of field and Galois theory, including straight-edge-and-compass construction and unsolvability of equations of fifth degree by radicals.

NOTE: Students who have received credit for MATH 492 may not take this course for credit.

MATH 474 Linear and Non-Linear Dynamical Systems (3 credits)

Prerequisite: MATH 245, 265 or equivalent, or permission of the Department. Systems of linear differential equations; fundamental matrices; non-homogeneous linear systems; non-linear systems; solutions and trajectories; the phase plane; stability concepts; Liapounov's second method; periodic solutions and limit cycles; introduction to boundary-value problems and Sturm-Liouville theory.

NOTE: Students who have received credit for MATH 373 may not take this course for credit.

MATH 475 Discrete Dynamical Systems, Chaos and Fractals (3 credits)

Prerequisite: MATH 245, 265 or equivalent, or permission of the Department. Introduction to discrete dynamical modelling; periodic points; bifurcation; period three points; symbolic dynamics; chaos; transitivity; conjugacy; complex behaviour; introduction to fractals; computer simulations.

NOTE: Students who have received credit for MATH 379 may not take this course for credit.

MATH 478 Non-Linear Programming (3 credits)

Prerequisite: MATH 361 or permission of the Department. Classical methods of optimization, Lagrange multipliers, Kuhn-Tucker conditions; line search methods, quadratic programming, gradient methods, introduction to dynamic programming.

NOTE: Students who have received credit for MATH 436 may not take this course for credit.

MATH 479 Convex and Non-Linear Analysis (3 credits)

Prerequisite: MATH 361 or permission of the Department. Support and separation of convex sets, extreme point characterizations, convex and dual cones, Farkas' theorem; minimax

theorem of Game Theory, Legendre-Fenchel conjugate, infimal convolution, subgradient calculus; Lagrangians, necessary and sufficient conditions for optimality in constrained minimization; the dual problem.

MATH 494 *Topics in Pure and Applied Mathematics* (3 credits)

MATH 495 *Reading Course in Pure and Applied Mathematics* (3 credits)

MATH 496 *Honours Project in Pure and Applied Mathematics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Statistics

STAT 249 *Probability I* (3 credits)

Prerequisite: Cégep Mathematics 105, 203 or equivalent. Axiomatic approach to probability; combinatorial probability; discrete and continuous distributions; expectation; conditional expectation; random sampling and sampling distributions.

NOTE: Students who have received credit for MATH 242 may not take this course for credit.

STAT 250 *Statistics* (3 credits)

Prerequisite: STAT 249 or equivalent. Point and interval estimation; hypothesis testing; Neyman Pearson Lemma and likelihood ratio tests; introduction to correlation and regression.

NOTE: Students who have received credit for MATH 243 may not take this course for credit.

STAT 287 *Statistics Lab I* (1 credit)

This lab will be associated with courses STAT 249 and 250 and will be helpful for the Probability portion of the Mathematical Foundations of Actuarial Science examination of the Society of Actuaries and the Casualty Actuarial Society.

NOTE: Students who have received credit for MATH 329 may not take this course for credit.

STAT 342 *Industrial Statistics* (3 credits)

Prerequisite: STAT 250 or MAST 333. Concepts of statistical quality control; \bar{X} -bar, R, P, and C control charts, acceptance sampling, sampling inspection, continuous sampling plans.

NOTE: Students who have received credit for MATH 342 may not take this course for credit.

STAT 343 *Sample Survey Theory and Applications* (3 credits)

Prerequisite: STAT 250 or MAST 333. Basic sampling designs and estimators; simple random sampling, stratified, cluster and systematic sampling. Sampling with unequal probabilities; ratio and regression methods of estimation.

NOTE: Students who have received credit for MATH 343 may not take this course for credit.

STAT 347 *Introduction to Non-Parametric Statistics* (3 credits)

Prerequisite: STAT 250 or MAST 333. Theory of rank tests, sign test, Mann-Whitney and Wilcoxon one-sample and two-sample tests, Kruskal-Wallis test, goodness of fit tests, Kolmogorov-Smirnov test, Pearson chi-square test, rank correlation and Kendall's tau.

NOTE: Students who have received credit for MATH 347 may not take this course for credit.

STAT 349 *Probability II* (3 credits)

Prerequisite: STAT 249 or equivalent. Markov decision process and applications. Poisson process, queuing theory, inventory theory; applications.

NOTE: Students who have received credit for MATH 337 and/or MATH 351 may not take this course for credit.

STAT 360 *Linear Models* (3 credits)

Prerequisite: STAT 250 or equivalent. Least-squares estimators and their properties. General linear model with full rank. Analysis of residuals; adequacy of model, lack of fit test, weighted least squares; stepwise regression, Durbin-Watson statistic; one way and two way analysis of variance.

NOTE: Students who have received credit for MATH 348 may not take this course for credit.

STAT 388 *Statistics Lab II* (2 credits)

This lab will use various softwares such as SYSTAT, SAS, SPLUS, MINITAB for data analysis.

NOTE: Students who have received credit for MATH 232 may not take this course for credit.

STAT 449 *Advanced Probability* (3 credits)

Prerequisite: STAT 249 or permission of the Department. Central limit theorems and law of large numbers, convergence of random variables, characteristic function, moment generating function, probability generating functions, random walk and reflection principle.

NOTE: Students who have received credit for MATH 451 may not take this course for credit.

STAT 450 *Mathematical Statistics* (3 credits)

Prerequisite: STAT 250; 449 previously or concurrently. Derivation of standard sampling distributions; distribution of order-statistics; estimation, properties of estimators; Rao-Cramer inequality, Rao-Blackwell theorem, maximum likelihood and method of moments estimation, Neyman-Pearson theory, likelihood ratio tests and their properties.

NOTE: Students who have received credit for MATH 454 may not take this course for credit.

STAT 452 *Introduction to Stochastic Processes* (3 credits)

Prerequisite: STAT 349; 449 previously or concurrently. Continuous stochastic processes.

Poisson processes, continuous time Markov process, queuing models, birth and death processes, renewal theory.

NOTE: Students who have received credit for MATH 353 may not take this course for credit.

STAT 460 Time Series and Forecasting
(3 credits)

Prerequisite: STAT 360. Time series, forecasting by trend and irregular components (using multiple regression analysis and exponential smoothing); forecasting seasonal time series, additive and multiplicative decomposition methods, Box-Jenkins methodology, moving average, autoregressive and mixed models.

NOTE: Students who have received credit for MATH 443 may not take this course for credit.

STAT 461 Operations Research II
(3 credits)

Prerequisite: STAT 349. Simulation and Monte-Carlo techniques; selected topics in operations research.

NOTE: Students who have received credit for MATH 437 may not take this course for credit.

STAT 465 Multivariate Statistics
(3 credits)

Prerequisite: MATH 252; STAT 360 or equivalent. Multivariate normal distribution; estimation and testing of hypothesis about mean vector; multiple and partial correlation; MANOVA; principal components analysis.

STAT 468 Design of Experiments
(3 credits)

Prerequisite: STAT 360. Construction and analysis of standard designs, including balanced designs; block designs; orthogonal designs; response surface designs.

STAT 480 Statistical Data Analysis
(3 credits)

Prerequisite: STAT 460 or permission of the Department. The analysis of real life data sets using computer packages. Topics will involve techniques from generalized linear models; model selection; log-linear models for categorical data analysis; logistic regression; censored survival models.

NOTE: Students who have received credit for MATH 445 may not take this course for credit.

STAT 497 Topics in Statistics (3 credits)

STAT 498 Reading Course in Statistics
(3 credits)

STAT 499 Honours Project in Statistics
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.220 PHILOSOPHY

Faculty	Chair ANDREW WAYNE, Associate Professor	DENNIS O'CONNOR JACK ORNSTEIN VLADIMIR ZEMAN																												
	Professors STANLEY G. FRENCH CHRISTOPHER B. GRAY	Adjunct Professor KAI NIELSEN																												
	Associate Professors MURRAY CLARKE SHEILA MASON																													
Location	Sir George Williams Campus Annex PR, Room: 202 (514) 848-2500																													
Department Objectives	The central mission of the Department is to contribute to the development of a critical, informed, and open mind. Classes and scholarship within the Department therefore both concentrate on and extend beyond the principal philosophical traditions that have influenced Western thought. Undergraduate courses provide a sound general education while encouraging students to follow related interests, such as political science, mathematics, or medicine. Honours programs prepare students for graduate studies.																													
Programs	<p>The Philosophy Department offers a number of programs of study which include: Honours, Major, and Minor. Double Majors programs are also offered in consultation with other departments. The Philosophy Department should be consulted for information concerning these programs. Seminars and tutorials are offered mainly for students in a program in Philosophy. In addition, courses are offered to students with a general or specific interest in Philosophy. Students enrolled in Philosophy programs are required to confirm their status with the Department during the second week of lectures of each year.</p> <p><i>Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.</i></p> <table><tr><td>60 BA Honours in Philosophy</td><td>36 BA Major in Philosophy</td></tr><tr><td>Stage I</td><td>Stage I</td></tr><tr><td>18 PHIL 214³, 232³, 260³, 261³, 263³, 265³</td><td>15 PHIL 232³, 260³, 261³, 263³, 265³</td></tr><tr><td>Stage II</td><td>Stage II</td></tr><tr><td>6 PHIL 360³, 361³</td><td>6 PHIL 360³, 361³</td></tr><tr><td>6 PHIL elective credits</td><td>9 PHIL elective credits: must include PHIL 210³ or 214^{3*}</td></tr><tr><td>12 PHIL elective or cognate credits at the 300 or 400 level*</td><td>Stage III</td></tr><tr><td>Stage III</td><td>6 PHIL elective credits at the 400 level*</td></tr><tr><td>9 PHIL 430³, 463³, 465³</td><td><i>*PHIL elective or cognate credits to be chosen in consultation with the Department.</i></td></tr><tr><td>9 PHIL elective or cognate credits at the 400 level*</td><td></td></tr><tr><td><i>*PHIL elective or cognate credits to be chosen in consultation with the Department.</i></td><td>24 Minor in Philosophy</td></tr><tr><td><i>NOTE: Students must apply to the departmental Honours adviser for formal admission to Honours programs. The application is usually made after completion of the first 30 credits.</i></td><td>6 Chosen from PHIL 232³, 263³, 265³</td></tr><tr><td></td><td>6 PHIL elective credits at the 200 level or higher</td></tr><tr><td></td><td>12 PHIL elective credits from the 300 level or higher</td></tr></table>		60 BA Honours in Philosophy	36 BA Major in Philosophy	Stage I	Stage I	18 PHIL 214 ³ , 232 ³ , 260 ³ , 261 ³ , 263 ³ , 265 ³	15 PHIL 232 ³ , 260 ³ , 261 ³ , 263 ³ , 265 ³	Stage II	Stage II	6 PHIL 360 ³ , 361 ³	6 PHIL 360 ³ , 361 ³	6 PHIL elective credits	9 PHIL elective credits: must include PHIL 210 ³ or 214 ^{3*}	12 PHIL elective or cognate credits at the 300 or 400 level*	Stage III	Stage III	6 PHIL elective credits at the 400 level*	9 PHIL 430 ³ , 463 ³ , 465 ³	<i>*PHIL elective or cognate credits to be chosen in consultation with the Department.</i>	9 PHIL elective or cognate credits at the 400 level*		<i>*PHIL elective or cognate credits to be chosen in consultation with the Department.</i>	24 Minor in Philosophy	<i>NOTE: Students must apply to the departmental Honours adviser for formal admission to Honours programs. The application is usually made after completion of the first 30 credits.</i>	6 Chosen from PHIL 232 ³ , 263 ³ , 265 ³		6 PHIL elective credits at the 200 level or higher		12 PHIL elective credits from the 300 level or higher
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Courses	<p>Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.</p> <p>In any given year, some 400-level courses will be cross-listed with graduate courses. In order to register in cross-listed courses, students would be expected to have completed at least 21 credits in Philosophy or receive permission of the Department.</p>																													

PHIL 201 *Problems of Philosophy*
(3 credits)

In this course, students are introduced to philosophical reasoning through the study of important philosophical problems. Typical issues to be discussed are: What is knowledge? (Does it require certainty? How is it distinct from belief?) Are human beings free? (Do people choose their actions or are their actions determined by causes outside their control?) If people are not free, then how can they be held morally responsible for their actions? Can God's existence be proven? (What if it cannot?) How is the mind related to the body, if at all? What is it to lead a good life? The focus of these investigations is on contemporary philosophical writings.

PHIL 210 *Critical Thinking* (3 credits)

Arguments are used for reasoning not just in philosophy but in people's everyday lives. This practical logic course focuses on the kinds of arguments one is likely to encounter in newspapers, philosophical, social, and political debates, and academic journals. Students learn what makes an argument good or bad. The objective is to make students better at understanding, evaluating, and constructing arguments in all areas of study.

NOTE: This is not a course in formal logic (see PHIL 214), though some formal methods of evaluation will be included.

PHIL 214 *Deductive Logic* (3 credits)

This course presents the modern symbolic systems of sentential and predicate logic. Students transcribe English sentences into a logical form, analyse the concepts of logical truth, consistency, and validity, as well as learn to construct derivations in each system.

NOTE: This course may not be taken for credit by students who have taken PHIL 212.

PHIL 216 *Introduction to the Philosophy of Language* (3 credits)

This course provides an introduction to the main problems in the philosophy of language, concerned with the analysis of the concepts of meaning, reference, truth, necessity.

PHIL 218 *Inductive Logic* (3 credits)

Prerequisite: PHIL 214, or permission of the Department. This course provides an introduction to probabilistic and non-probabilistic approaches to inductive logic. Topics covered may include: Hume's problem of induction, the new riddle of induction, causality, and the interpretation of the probability calculus.

PHIL 220 *Introduction to the Philosophy of Science* (3 credits)

This course provides an introduction to the main problems in the philosophy of science. These include the structure of scientific theories, various models of scientific method and explanation,

and the existence of unobservables.

NOTE: Students who have received credit for INTE 250 or PHIL 228 or SCHL 250 may not take this course for credit.

PHIL 226 *Mind and Action* (3 credits)

Drawing from contemporary work in philosophy and psychology, students have the opportunity to consider philosophical questions about the nature of the mind. For example: Is a mind just a brain? Can there be disembodied minds? What is conscious experience and how is it to be studied? Is artificial intelligence possible? The other major theme of this course is the possible motives for human action. For example: Can people act without intentions? Can they have intentions without free will? What influence do environmental, genetic, and societal factors have on their actions?

NOTE: Students who have received credit for PHIL 225 may not take this course for credit.

PHIL 232 *Introduction to Ethics*
(3 credits)

Philosophical discussions of ethics have both practical significance (What should one do?) and theoretical interest (What does it mean to say "That's the right thing to do"?). In this course, students are introduced to some representative approaches to ethical thought and action. General questions about the nature of ethical reasoning are also considered. For example: Are there objective ethical truths or are ethical judgements merely relative to social norms? An effort is made to incorporate those ethical issues which are of specific importance to contemporary society.

PHIL 234 *Business Ethics* (3 credits)

The purpose of this course is to elucidate the key ethical notions with reference to the business world. The intention is to make students aware of situations in which ethical implications arise, rather than to impose specific rules.

NOTE: Students who have received credit for PHIL 242 may not take this course for credit.

PHIL 235 *Biomedical Ethics* (3 credits)

Bioethics is an interdisciplinary subject that overlaps areas of medicine, law, and philosophical ethics. This course is primarily concerned with contemporary biomedical debates, many of which are of current social and political significance: euthanasia and physician-assisted suicide, patients' rights, animal experimentation, organ donation and transplantation, palliative care, abortion, genetic engineering, and new reproductive technologies.

PHIL 255 *Philosophy of Leisure*
(3 credits)

This course examines philosophical problems relating to such issues as leisure, recreation, labour, time, and fulfilment. The aim is to stimulate the student to think critically about the goals of individuals and of society as they concern

these issues. The course is of interest to students in Therapeutic Recreation and Leisure Sciences and to others interested in the problems of using free time to best advantage.

PHIL 260 *Presocratics and Plato*
(3 credits)

A critical examination of some central philosophical theories of the Presocratics and Plato.
NOTE: Students who have received credit for PHIL 310 or 370 may not take this course for credit.

PHIL 261 *Aristotle and Romans*
(3 credits)

Prerequisite: PHIL 260, or permission of the Department. A critical examination of some central philosophical theories of Aristotle and the Romans.
NOTE: Students who have received credit for PHIL 310 or 370 may not take this course for credit.

PHIL 263 *Introduction to Epistemology*
(3 credits)

An introduction to the basic concepts and problems in epistemology, including belief, knowledge, scepticism, perception, and intentionality.

PHIL 265 *Introduction to Metaphysics*
(3 credits)

Metaphysics is the philosophical study of the ultimate nature of reality. In other words, it considers the question "What is there?" in several areas of study. For example: Are there minds? It seems so, but perhaps there are merely brains. Is there time? Not in the everyday sense of watches and clocks, but independently of humans. Do objective moral values exist or are they made up? Is there a God and, if so, what is that God like? An effort is made to relate these and other philosophical speculations to contemporary science, and, as well, to indicate the ways in which metaphysics is distinct from science.

PHIL 266 *Introduction to Philosophy of Religion* (3 credits)

There is a long philosophical tradition concerned with the existence of God. In this course, various proofs for God's existence are discussed and evaluated, as are a number of other issues. For example: How does the existence of evil affect one's views about God and God's nature? What is the status of miracles? What is religious experience and the nature of religious faith? How is one to understand religious language?

PHIL 285 *Non-Western Philosophy*
(3 credits)

This course introduces the student to the philosophical activities of non-Western cultures. The particular focus differs from year to year.

PHIL 298 *Introductory Topics in Philosophy* (3 credits)

PHIL 299 *Introductory Topics in Philosophy* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHIL 314 *Intermediate Logic: Metatheory*
(3 credits)

Prerequisite: PHIL 214, or permission of the Department. This course presents the basic concepts of metalogic, including mathematical induction, soundness and completeness, decidability.
NOTE: Students who have received credit for PHIL 323 may not take this course for credit.

PHIL 315 *Intermediate Logic: Themes and Problems* (3 credits)

Prerequisite: PHIL 214, or permission of the Department. The subject of this course varies from offering to offering among the following possible studies: modal logic, probabilistic logic, many-valued logic, relevance logic, and historical themes in logic.
NOTE: Students who have received credit for PHIL 321 may not take this course for credit.

PHIL 318 *(also listed as SCHA 318) Philosophy of Biology*
(3 credits)

Prerequisite: PHIL 220, or permission of the Department. This course examines a variety of philosophical issues in biology. Topics covered may include: fitness, function, units of selection, the nature of species, reductionism, biological explanation of human behaviour and the ethical and epistemological consequences of evolutionary theory.
NOTE: Students who have received credit for SCHA 318 may not take this course for credit.

PHIL 324 *Philosophy of Social Science*
(3 credits)

Prerequisite: Three credits in Philosophy or 12 credits in a social science department, or permission of the Department. Philosophical examination of the structure and methodology of the social sciences.
NOTE: Students who have received credit for PHIL 346 may not take this course for credit.

PHIL 325 *Minds, Brains and Machines*
(3 credits)

Prerequisite: PHIL 226, or permission of the Department. An examination of the computer model of the mind by consideration of the classical computationalist account and its problems, together with some attention to the connectionist alternative.

PHIL 327 *Artificial Intelligence* (3 credits)
Prerequisite: Three credits in Philosophy or Computer Science. The purpose of this course

is to explore the analogy between mental activity and the operation of computers or "electronic brains", with a view to answering the question: Can machines think? Such topics as the following are treated: the concept of the Turing machine; the Turing test of intelligence; the functionalist theory of the mind; the nature of creativity; and the alleged implications of Gödel's incompleteness theorem.

NOTE: Students who have received credit for PHIL 354 may not take this course for credit.

PHIL 328 *Conceptual Revolutions in Science: Space and Time*
(3 credits)

This course studies the philosophical implications of major scientific revolutions in our understanding of space, time and gravity. Examples of such revolutions may include the Newtonian revolution and Einstein's theories of relativity.

PHIL 329 *Conceptual Revolutions in Science: Quantum Theory*
(3 credits)

This course examines the philosophical implications of quantum revolution. Topics covered may include the fundamental concepts of quantum mechanics, quantum nonlocality, Schrödinger's Cat (the measurement problem), and quantum field theory.

PHIL 333 *Philosophical Ideas in Literature* (3 credits)

Prerequisite: Three credits in Philosophy, or permission of the Department. An approach to philosophical ideas in literature through a comparison of authors. This could involve authors from different historical time frames, and different cultural world views, or elaborate different perspectives of a single author.

PHIL 339 *Aesthetics* (3 credits)

Prerequisite: Three credits in Philosophy, or permission of the Department. A survey of classical aesthetic theory in Western philosophy, with particular attention to major developments in the modern and contemporary periods.

NOTE: Students who have received credit for PHIL 353 may not take this course for credit.

PHIL 342 *Political Philosophy* (3 credits)

Prerequisite: Six credits in Philosophy. This course provides a critical analysis of political-philosophical concepts. These concepts may include tolerance, violence, separatism, racism, and nationalism.

PHIL 343 *Philosophy of Law: General Jurisprudence* (3 credits)

A philosophical study of natural law, legal positivist, and legal realist replies to the question of what law is. Contemporary and classical replies are criticized and are applied to cases. The associated issues of legal moralism, legal justice, legal obligation and its limits, and

legal reasoning are treated.

NOTE: Students who have received credit for PHIL 357 may not take this course for credit.

PHIL 344 *The Philosophy of Liberalism*
(3 credits)

In this course, the student examines several perspectives from which the problem of the relation between law and morality may be treated. Conflicting concepts of law, morality, and the relation of the individual to society are discussed. The problem of authority is examined in relation to issues of civil liberties, civil rights, and the social basis of legal conflicts.

PHIL 345 *Legal Philosophy: Legal Rights and Duties* (3 credits)

A philosophical study of the nature, sources, and functions of rights and duties. Attention is given to the particular rights associated with contract and property, and their abuse; to duties arising by law alone; to excuses and justifications for failure to fulfil duties; and to enforcement, punishment, and compromise.

NOTE: Students who have received credit for PHIL 358 may not take this course for credit.

PHIL 352 *Philosophy of History*
(3 credits)

Prerequisite: Six credits in History, or permission of the Department. An analysis of the nature of historical knowledge and explanation is followed by a study of classical and contemporary attempts to elucidate the meaning of history. Authors discussed include Augustine, Vico, Kant, Hegel, Marx, Spengler, Popper, Toynbee, Arendt.

PHIL 356 *Philosophy of Education*
(3 credits)

An examination of philosophical principles underlying educational theories and of the problems arising from the practical implementation of those theories.

NOTE: Students who have received credit for PHIL 349 may not take this course for credit.

PHIL 360 *Rationalism* (3 credits)

Prerequisite: PHIL 260, 261 and 12 credits in Philosophy, or permission of the Department. A critical study of the work of Descartes, Spinoza and Leibniz covering metaphysical, ethical and epistemological issues.

NOTE: Students who have received credit for PHIL 412 or 473 may not take this course for credit.

PHIL 361 *Empiricism* (3 credits)

Prerequisite: PHIL 260, 261, 360 and 12 credits in Philosophy, or permission of the Department. A critical study of central aspects of the work of Locke, Berkeley and Hume on a variety of philosophical issues.

NOTE: Students who have received credit for PHIL 412 or 473 may not take this course for credit.

PHIL 371 *Philosophy of Feminism*
(3 credits)

Prerequisite: PHIL 232 and 263, or permission of the Department. This course provides an introduction to some of the central issues in contemporary philosophy of feminism. The key arguments in feminist epistemology, feminist ethics, and sex and gender studies are discussed from a variety of perspectives.

NOTE: Students who have received credit for PHIL 247 may not take this course for credit.

PHIL 377 *Twentieth Century Continental Philosophy* (3 credits)

Prerequisite: Six credits in Philosophy, or permission of the Department. An examination of twentieth century French and German philosophy. Philosophers examined may include Husserl, Heidegger, Merleau-Ponty, Foucault, Derrida, Habermas or others.

NOTE: Students who have received credit for PHIL 313 or 376 may not take this course for credit.

PHIL 378 *American Philosophy*
(3 credits)

Prerequisite: Six credits in Philosophy, or permission of the Department. An analysis of some classical American pragmatists, such as Peirce, Dewey, James and C.I. Lewis, together with exponents of contemporary neo-pragmatism, such as Putnam, Rorty and Quine.

NOTE: Students who have received credit for PHIL 313 or 376 may not take this course for credit.

PHIL 385 *Marxism* (3 credits)

A critical analysis of the ideas of Marx and their modern development.

NOTE: Students who have received credit for PHIL 335 may not take this course for credit.

PHIL 386 *Existentialism* (6 credits)

A course designed to acquaint the student with the fundamentals of the existentialist movement as a philosophical perspective. Among philosophers considered are Kierkegaard, Nietzsche, Heidegger, Sartre, Merleau-Ponty, Jaspers, Marcel, and Berdyaev.

NOTE: Students who have received credit for PHIL 312 may not take this course for credit.

PHIL 398 *Intermediate Special Topics in Philosophy* (3 credits)

PHIL 399 *Intermediate Special Topics in Philosophy* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHIL 414 *Advanced Topics in Logic*
(3 credits)

Prerequisite: PHIL 314, or permission of the Department. This course will present the

fundamentals of an advanced topic in logic.

NOTE: Students who have received credit for PHIL 422 may not take this course for credit.

PHIL 416 *Philosophy of Language*
(3 credits)

Prerequisite: Twelve credits in Philosophy among which is required PHIL 216, or permission of the Department. Advanced study of a central problem in recent philosophy of language.

PHIL 420 *Advanced Philosophy of Science: Scientific Explanation and Theory Change* (3 credits)

Prerequisite: PHIL 220 and 12 credits in Philosophy, or permission of the Department. PHIL 214 is highly recommended. This course provides an in-depth study of the justification and explanatory power of scientific theories and the rationality of theory change in science.

NOTE: Students who have received credit for PHIL 421 may not take this course for credit.

PHIL 422 *Advanced Philosophy of Science: Scientific Realism*
(3 credits)

Prerequisite: PHIL 220 and 12 credits in Philosophy, or permission of the Department. PHIL 214 is highly recommended. This course provides an in-depth study of contemporary debates concerning realism and anti-realism. For instance, it examines the status of unobservable entities such as quarks, genes, and the Super-Ego.

NOTE: Students who have received credit for PHIL 421 may not take this course for credit.

PHIL 425 *Philosophy of Mind: Cognitive Science* (3 credits)

Prerequisite: PHIL 325, or permission of the Department. An interdisciplinary study which combines the philosophical study of mind with current research in psychology, neuro-science, linguistics, and computer science.

NOTE: Students from related disciplines are welcome, and should consult the instructor concerning prerequisites.

NOTE: Students who have received credit for PHIL 426 may not take this course for credit.

PHIL 430 *Advanced Studies in Ethics*
(3 credits)

Prerequisite: PHIL 232, or permission of the Department. A critical analysis of leading ethical theories from Moore to the present. Special attention is given to the naturalistic fallacy, the reducibility or normative statements, ethical reasoning, and the relation of ethics to psychology and sociology.

NOTE: Students who have received credit for PHIL 456 may not take this course for credit.

PHIL 463 *Honours Seminar in Epistemology* (3 credits)

Prerequisite: PHIL 263 and 12 credits in Philosophy, or permission of the Department.

Intensive study of major contemporary issues in the theory of knowledge.

NOTE: Students who have received credit for PHIL 460 may not take this course for credit.

PHIL 465 *Honours Seminar in Metaphysics* (3 credits)

Prerequisite: PHIL 265 and 12 credits in Philosophy, or permission of the Department. Intensive study of major contemporary issues in metaphysics.

NOTE: Students who have received credit for PHIL 460 may not take this course for credit.

PHIL 471 *Advanced Topics in Feminist Theory* (3 credits)

Prerequisite: PHIL 371, or permission of the Department. An examination of recent issues in one of feminist ethics, epistemology or metaphysics. Subject will vary from year to year.

PHIL 474 *Nineteenth-Century Philosophy* (6 credits)

Prerequisite: Six credits in Philosophy, or permission of the Department. An examination of some of the main currents of post-Kantian philosophy. Hegel and the post-Hegelians, the romantic reaction, positivism, and pragmatism.

NOTE: Students who have received credit for PHIL 417 may not take this course for credit.

PHIL 480 *Plato* (3 credits)

Prerequisite: Twelve credits in Philosophy among which is required PHIL 260 and 261, or permission of the Department. An analysis of some of the central themes in the major dialogues of Plato.

PHIL 481 *Aristotle* (3 credits)

Prerequisite: Twelve credits in Philosophy among which is required PHIL 260 and 261, or permission of the Department. An analysis of the central themes in selected passages from the major works of Aristotle.

PHIL 485 *Kant* (6 credits)

Prerequisite: Twelve credits in Philosophy, or permission of the Department. An intensive study of Kant's *Critique of Pure Reason* and related works.

PHIL 486 *Hegel* (6 credits)

Prerequisite: Twelve credits in Philosophy, or permission of the Department. An analysis of selected themes from Hegel's works.

PHIL 487 *Early Analytic Philosophy* (3 credits)

Prerequisite: Twelve credits in Philosophy, or permission of the Department. This course investigates selected philosophical problems as they arise in the writings of such early analytic philosophers as Moore, Russell, Ayer, Carnap,

and the early Wittgenstein.

NOTE: Students who have received credit for PHIL 467 may not take this course for credit.

PHIL 488 *Contemporary Analytic Philosophy* (3 credits)

Prerequisite: Twelve credits in Philosophy, or permission of the Department. This course investigates selected philosophical problems as they arise in the writings of such analytic philosophers as the later Wittgenstein, Quine, Ryle, Wisdom, Austin, and others.

NOTE: Students who have received credit for PHIL 468 may not take this course for credit.

PHIL 489 *Phenomenology* (6 credits)

Prerequisite: Twelve credits in Philosophy, or permission of the Department. Origins and development of phenomenology from Brentano and Meinong through the different stages of Husserl's writings. Post-Husserlian modifications are considered briefly. The second term is devoted to a discussion of the influence of the phenomenological movement on contemporary developments in the social sciences and humanities. Actual topics are determined by the student's areas of interest and academic qualifications.

NOTE: Students who have received credit for PHIL 449 may not take this course for credit.

PHIL 496 *Tutorial in Philosophy* (3 credits)

Prerequisite: Permission of the Department. This is an opportunity to carry out a personal project under the supervision of a Faculty member. An intensive reading program is undertaken in the student's area of special interest. Tutorials may be arranged with any Faculty member, and the student must make these arrangements and obtain *written* permission in advance of registration.

NOTE: Students who have received credit for PHIL 471 may take this tutorial for credit provided the subject matter is different.

PHIL 497 *Tutorial in Philosophy* (3 credits)

Prerequisite: Permission of the Department. See PHIL 496 for description.

NOTE: Students who have received credit for PHIL 472 and/or 496 may take this tutorial for credit provided the subject matter is different.

PHIL 498 *Advanced Topics in Philosophy* (3 credits)

PHIL 499 *Advanced Topics in Philosophy* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.230

PHYSICS

Faculty	<p><i>Acting Chair</i> JOHN A. CAPOBIANCO, <i>Professor</i></p> <p><i>Professors</i> J. DAVID CHEEKE BARRY FRANK MARIANA FRANK</p>	<p>CALVIN S. KALMAN SUSHIL K. MISRA PANAGIOTIS VASILOPOULOS</p> <p><i>Associate Professors</i> RAMESH C. SHARMA JOSEPH SHIN</p>
Location	<p><i>Sir George Williams Campus</i> Hall Building, Room: H 841 (514) 848-3270</p>	
Department Objectives	<p>In the twentieth century, breakthroughs in physics have revolutionized thinking about the fundamentals of matter, motion, and energy. Physics is the study of these fundamentals. The Physics Department is committed to preparing students for careers or advanced study in both the theoretical and applied aspects of physics. Students in the co-op program gain valuable job experience and discover the career opportunities open to them in addition to regular course work.</p>	
Programs	<p>Students are required to complete the appropriate entrance profile for entry into the program (see §31.002 — Programs and Admission Requirements — Profiles).</p> <p><i>Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.</i></p> <p>42 Core Program 6 MAST 218³, 219³ 33 PHYS 232³, 233³, 245³, 253³, 254³, 334³, 335³, 346³, 352³, 364³, 477³ 3 PHYS 291¹, 293¹, 394¹</p> <p>63 BSc Specialization in Physics 42 Core Program 12 PHYS 435³, 436³, 458³, 466³ or 467³ 9 Chosen from PHYS 290² and 297¹, 353³, 355³, 466³ or 467³, 478³, 494³, 498³</p> <p>90 BSc Specialization in Physics/Marketing 42 Core Program 15 COMM 210³, 212³, 215³, 222³, 224³ 6 ECON 201³, 203³</p> <p>3 ACCO 220³ 12 Chosen from the Department of Marketing 12 Elective credits (physics, math and computing)</p> <p>42 BSc Major in Physics 42 Core Program Students in the Major program may replace PHYS 346³ with PHYS 355³ and/or PHYS 477³ with PHYS 353³</p>	

PHYSICS CO-OPERATIVE PROGRAM

Director
MARIANA FRANK, *Professor*

The Physics Co-operative program is offered to students who are enrolled in the BSc Specialization programs in Physics. Students interested in applying for the Physics co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is very similar to that of the regular programs, with some specific recommendations for courses to improve the students' job skills. While it is hoped that most of the positions will be in the Montréal area, students must be prepared to work in other parts of Canada.

Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Physics co-op committee, which includes the student's advisers. Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

PHYS 204 *Mechanics* (3 credits)

Prerequisite: MATH 203 or equivalent, previously or concurrently. Kinematics. Newton's laws of motion. Statics, dynamics. Conservation of momentum and energy. Rotational motion. Periodic motion. Lectures only.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration. See PHYS 224 for laboratory associated with this course.

PHYS 205 *Electricity and Magnetism* (3 credits)

Prerequisite: MATH 203; PHYS 204 or equivalent. Electrical charge and Coulomb's law. Electrical field and potential. Capacity, steady state, and transient currents. Electromagnetic induction and alternating currents. Lectures only.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration. See PHYS 225 for laboratory associated with this course.

PHYS 206 *Waves and Modern Physics* (3 credits)

Prerequisite: PHYS 204 or equivalent. Simple harmonic motion. Wave propagation. Superposition. Stationary waves. Doppler effect. Interference. Diffraction. Photoelectric effect. Compton effect. Bohr's atom. Radioactivity, fission, fusion. Lectures only.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration. See PHYS 226 for laboratory associated with this course.

PHYS 210 *Discoveries in Physics* (6 credits)

A non-mathematical course in physics specifically designed for students who have had little or no experience in physics. This course traces the fundamental ideas from which modern physics has emerged, and attempts to develop insights into the understanding of natural phenomena. Lectures only.

NOTE: Students in programs leading to the BSc degree may not take this course for credit.

PHYS 224 *Introductory Experimental Mechanics* (1 credit)

Prerequisite: PHYS 204 previously or concurrently, or permission of the Department. This laboratory course covers fundamental experiments in classical mechanics. Experiments

include resolution of forces, centrifugal force and conservation of energy, pendulums. Laboratory only, 10 experiments.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

PHYS 225 *Introductory Experimental Electricity* (1 credit)

Prerequisite: PHYS 205 previously or concurrently, or permission of the Department. This laboratory course covers fundamental experiments in electricity. Experiments include Kirchhoff's law, resistors in series and parallel, oscilloscope, induction, alternating current. Laboratory only, 10 experiments.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

PHYS 226 *Introductory Experimental Waves and Modern Physics* (1 credit)

Prerequisite: PHYS 206 previously or concurrently, or permission of the Department. This laboratory course covers the fundamental experiments in waves and modern physics. Experiments include spectrometer measurements. Newton's rings and measurements involving radioactivity. Laboratory only, 10 experiments.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

PHYS 232 *Theoretical Physics I* (3 credits)

Prerequisite: MAST 218 previously or concurrently. Linear algebra: vector spaces, Euclidean n-space, linear transformations, matrices, similarity transformations, diagonalization, applications. Differential equations: Wronskian, n-th order differential equations, linear differential equations with variable coefficients, power series method. Lectures only.

PHYS 233 *Object-Oriented Programming and Applications* (3 credits)

Prerequisite: MATH 203, 204. This course is an introduction to object-oriented programming using C++ and Unix, Common Unix commands, and the vi(m) editor. It focuses on E-mail (pine), transfer of files over the Internet, accessing course materials on the Web, C++ classes and objects, class design and implementation, data types, operators, functions, selection statements, repetition statements, arrays and pointers.

Applications include fundamentals of statistics, and linear least squares analysis.

NOTE: Students who have received credit for COMP 215 or 248 may not take this course for credit.

PHYS 234 Computational Methods in Science (3 credits)

Prerequisite: MATH 203, 204. This course reviews Internet access of course materials and main principles of object-oriented programming. There is an exchange of files containing greek letters, scientific formulae, etc. (TeX, LaTeX, Scientific Notebook and Maple). Creation of Web pages. Graphical display of functions and data obtained from other applications (including C++ output files). Root finding, Runge-Kutta method for differential equations, numerical integration, systems of linear equations, Monte Carlo computer simulations.

NOTE: Students who have received credit for this topic under a PHYS 298 number may not take this course for credit.

PHYS 245 Classical Mechanics (3 credits)

Prerequisite: MATH 204, 205 or equivalent. Statics of rigid bodies, work and potential functions, motion in uniform field. Particle motion in an accelerated frame, rotation coordinate systems, motion in a resisting medium, small oscillations, damped (harmonic) motion, motion under central forces, mechanics of a rigid body, dynamics of systems of particles, motion of rigid bodies in three dimensions, elements of Lagrangian mechanics. Lectures only.

NOTE: See PHYS 291 for laboratory associated with this course.

NOTE: Students who have received credit for PHYS 243 or 244 may not take this course for credit.

PHYS 253 Electricity and Magnetism I (3 credits)

Prerequisite: PHYS 205 or equivalent; MAST 218 or equivalent, previously or concurrently. Electrostatics, Gauss' law, electric potential, curl and divergence of fields, capacitance, RC circuits, Laplace's equation, Legendre equation, method of images, multipole expansion, dielectrics, polarization, dipole moments, electric displacement.

NOTE: See PHYS 293 for laboratory associated with this course.

PHYS 254 Electricity and Magnetism II (3 credits)

Prerequisite: PHYS 253 or equivalent; MAST 219 or equivalent, previously or concurrently. Biot-Savart Law, Ampere's law, divergence and curl of B, magnetic vector potential, magnetization, ferromagnetism, electromagnetic induction, motional EMF, inductance, transformer, ac-circuits, Maxwell's equations, the wave equation, polarization, reflection and transmission of em waves, rectangular wave guide, half-wave antenna. Lectures only.

PHYS 270 Introduction to Energy and Environment (3 credits)

This course is designed for students who have little or no background in physics. Topics covered include relationship of physics to environment and energy. Concept and definition of work and energy. Interaction of people and inanimate objects with the environment. Heat and chemical energy. Electromagnetic and nuclear energy. Conservation of energy — how it affects everyday life. Sources of energy used on earth. Solar energy. Production of wind power, water power, solar cells from sun's energy, biological uses, biopower. Lectures only.
NOTE: Students in programs leading to the BSc degree may not take this course for credit.

PHYS 273 Energy and Environment (3 credits)

Prerequisite: PHYS 270, or six credits in cégep Physics, or equivalent. Nuclear energy stored in the earth. Geothermal energy. Biological energy stored in the earth. Second law of thermodynamics. Entropy. Food energy. Home heating and cooling. Solar heating. Transportation of people, goods, and energy. Recycling materials. Resource conservation and humanity's ability to change — need for a conservation ethic, need for alternate energy sources, need for public knowledge. Lectures only.

PHYS 290 Experimental Electronics (2 credits)

Prerequisite: PHYS 205, 225 or equivalent. A practical laboratory course in electronics. This course explores the usage of electronic measuring instruments and components. Experiments include power supplies, transistor amplifiers, operational amplifiers, oscillators, audio and radio frequency amplifiers.

NOTE: Students who have received credit for PHYS 295 and 296 may not take this course for credit.

PHYS 291 Experimental Mechanics I (1 credit)

Prerequisite: PHYS 245 previously or concurrently. A laboratory course in mechanics. Experiments include pendulum, coefficient of restitution, centrifugal force, rotational inertia, inelastic impact.

PHYS 292 Experimental Mechanics II (1 credit)

Prerequisite: PHYS 291. A laboratory course in mechanics. Experiments include the use of air tracks to study acceleration, collisions, dissipative forces, and periodic motion. Other experiments include viscosity and surface tension of liquids.

PHYS 293 Experimental Electricity and Magnetism I (1 credit)

Prerequisite: PHYS 253 previously or concurrently. A laboratory course in electricity and magnetism. Experiments include motion of

electrons in electric and magnetic fields, exponential relaxation, damped oscillations, resonance, non-linearity, negative resistance.

PHYS 294 *Experimental Electricity and Magnetism II* (1 credit)

Prerequisite: PHYS 293. A laboratory course in electricity and magnetism. Experiments include the transistor, amplification and frequency response, transient response and negative feedback, positive feedback and oscillation, periodic structures.

PHYS 295 *Experimental Electronics I* (2 credits)

A practical laboratory course in electronics. Experiments include resistors in series and parallel, voltmeter, Ohm's law, Kirchhoff's current and voltage laws, Ohmmeter, capacitor, inductor, transformer, rectifiers, voltage doubler, zener diode, power supplies.

NOTE: Students who have received credit for PHYS 290 may not take this course for credit.

PHYS 296 *Experimental Electronics II* (2 credits)

Prerequisite: PHYS 295. A practical laboratory course in electronics. Experiments include oscilloscope, biasing of bipolar transistors, transistor amplifiers, voltage and current regulators, field-effect transistor, oscillators, operational amplifier circuits, audio amplifier, I-F transformer, limiter, amplitude and frequency modulation.

NOTE: Students who have received credit for PHYS 290 may not take this course for credit.

PHYS 297 *Experimental Optics* (1 credit)

Prerequisite: PHYS 352 previously or concurrently. An experimental course in optics. Experiments include diffraction, optical instruments, resonance, and various experiments using lasers. Laboratory only, 10 experiments.

NOTE: Students who have received credit for PHYS 392 may not take this course for credit.

PHYS 298 *Selected Topics in Physics* (3 credits)

PHYS 299 *Selected Topics in Physics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHYS 334 *Thermodynamics* (3 credits)

Prerequisite: PHYS 204 or equivalent; MAST 218, 219 or equivalent. Equation of state, ideal and real gases, thermodynamic surfaces, first law of thermodynamics, isothermal and adiabatic processes, the energy equation, liquefaction of gases, Carnot engine, second law of thermodynamics, entropy, third law, thermodynamic potentials, Clausius-Clapeyron equation, kinetic theory, equipartition of energy, Van der Waals'

equation, transport phenomena, probability and thermal distributions. Lectures only.

NOTE: See PHYS 393 for laboratory associated with this course.

PHYS 335 *Theoretical Physics II* (3 credits)

Prerequisite: PHYS 232 or equivalent; MAST 219 previously or concurrently. Function of a complex variable, Fourier series, applications to a vibrating string, heat conduction, Fourier transform, Laplace transform, application to differential equations, delta functions, eigenvalue problems. Lectures only.

PHYS 346 *Advanced Classical Mechanics and Special Relativity* (3 credits)

Prerequisite: PHYS 232 or equivalent; PHYS 245 or equivalent; MAST 219 or equivalent. Generalized coordinates, Lagrange's equations, method of Lagrange multipliers, variation formulation, Hamilton's equations of motion, canonical transformation, Hamilton-Jacobi theory, special theory of relativity, Einstein's axioms, Lorentz transformation, form invariance and tensors, four-vector, gravity. Lectures only.

NOTE: Students who have received credit for PHYS 344 or 345 may not take this course for credit.

PHYS 352 *Optics* (3 credits)

Prerequisite: PHYS 206; PHYS 254 recommended. Superposition of waves, phase and group velocities, dispersion, interference, double slit, Michelson interferometer, reflectance and transmittance of thin films, diffraction, Fraunhofer and Fresnel diffraction, polarization, polariscope, dichroism, Fabry-Perot etalon, electron, acoustic and other microscopes, resolving power, Fourier optics, introduction to lasers and fibre optics. Lectures only.

NOTE: Students who have received credit for PHYS 252 may not take this course for credit.

PHYS 353 *Solid State Electronic Devices* (3 credits)

Prerequisite: PHYS 253 or equivalent. Crystal structure, energy band theory, carrier transport, depletion region, current-voltage characteristics, Zener diode, metal-semiconductor junction, special diodes, tunnel diode, photo-diode, LEDs, Schottky diode, bipolar junction transistors, field effect transistors, metal oxide semiconductor FET, integrated circuits, elements of integrated circuits. Lectures only.

NOTE: Students who have received credit for PHYS 354 may not take this course for credit.

PHYS 355 *Electronics* (3 credits)

Prerequisite: PHYS 353 recommended. Basic circuit analysis, network theorems, maximum power transfer, diode characteristics and circuits, power supply designs, transistor characteristics, incremental equivalent circuits, input and output impedance calculations, emitter follower and Darlington amplifiers, power amplifiers, dc

stabilization and negative feedback, operational amplifiers, phase detection, frequency multiplier and special circuits. Lectures only.

NOTE: See PHYS 290 for laboratory associated with this course.

PHYS 364 Atomic Physics (3 credits)

Prerequisite: PHYS 205, 206 or equivalent; PHYS 254 recommended. The photoelectric effect, X-ray and bremsstrahlung, Compton effect, photon-electron interaction, DeBroglie waves, X-rays and electron diffraction, the uncertainty principle, Schrödinger's equation, particle in a box, Bohr theory of the hydrogen atom, Schrödinger's equation of hydrogen atom, Franck-Hertz experiment, Zeeman effect, electron spin, Stern-Gerlach experiment. Lectures only.

NOTE: See PHYS 394 for laboratory associated with this course.

PHYS 384 Introduction to Astronomy
(3 credits)

Prerequisite: PHYS 205 or equivalent; MATH 205 or equivalent. The celestial sphere. The solar system. Celestial mechanics. Basic stellar characteristics. The galaxy — structure and content. Extragalactic objects. Lectures only.

PHYS 385 Astrophysics (3 credits)

Prerequisite: PHYS 384. The stars, stellar atmospheres, motion, interiors, and populations. Variable stars. Nebulae. Radio, X-ray, and infrared sources. The galaxy — population and dynamics. The extragalactic universe. Lectures only.

PHYS 390 Experimental Digital Electronics (3 credits)

Prerequisite: PHYS 296 or equivalent. Breadboarding digital circuits; gating a signal; truth tables; decade counter; decoders, demultiplexers, multiplexers and sequencers; light-emitting diodes and LED displays; tristate and open collector outputs; flip-flops, monostable multivibrators; semiconductor memories; registers, binary counters, arithmetic logic units. Laboratory only.
NOTE: Students who have received credit for PHYS 396 may not take this course for credit.

PHYS 391 Introduction to Experimental Microprocessors and Assembly Language Programming
(3 credits)

Prerequisite: PHYS 233; COMP 212 or equivalent. Eight-bit microprocessor architecture: opcodes, addressing modes, memory mapped I/O, vectored interrupts, etc. The MS/DOS operating system, word processing, Motorola assembly language: pseudocodes, labels, subroutines, interrupt service routines, structured programming techniques. Cross assemblers, RS232 serial transmission of ASCII and binary data to remote computers. Laboratory only.
NOTE: Students who have received credit for PHYS 396 may not take this course for credit.

PHYS 392 Experimental Medical Electronics (3 credits)

Prerequisite: PHYS 290 or 296, or equivalent. A laboratory course in the maintenance and use of medical instruments, including ECG monitor, electrocardiograph, cardio-tachometer, blood-pressure recorder, respiration-rate recorder, and clinical thermometer. The component parts of the instruments are studied first, and then the instruments are constructed and tested. Laboratory only.

NOTE: Students who have received credit for PHYS 397 may not take this course for credit.

PHYS 393 Experimental Thermodynamics
(1 credit)

Prerequisite: PHYS 334 previously or concurrently. A laboratory course in thermodynamics. Experiments include Clement and Desormes' experiment, vaporization, specific heats, liquid nitrogen boiling. Laboratory only, 10 experiments.
NOTE: Students who have received credit for PHYS 494 may not take this course for credit.

PHYS 394 Experimental Atomic Physics
(1 credit)

Prerequisite: PHYS 226 or equivalent, or permission of the Department. An experimental course in atomic physics. Experiments include the Frank-Hertz experiment, the Zeeman effect, mass spectrometer, and some X-ray work. Laboratory only, 10 experiments.

PHYS 398 Selected Topics in Physics
(3 credits)

PHYS 399 Selected Topics in Physics
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHYS 435 Statistical Physics (3 credits)

Prerequisite: PHYS 334, 364. Statistical concepts, probability, Gaussian probability distribution, statistical ensemble, macrostates and microstates, thermodynamic probability, statistical thermodynamics, reversible and irreversible processes, entropy, thermodynamic laws and statistical relations, partition functions, Maxwell's distributions, phase transformation, Maxwell-Boltzmann, Fermi-Dirac, and Bose-Einstein statistics, quantum statistics in classical limit, black-body radiation, conduction of electrons in metal, interacting particle system, lattice vibrations, virial coefficients, Weiss molecular field approximation. Lectures only.

PHYS 436 Theoretical Physics III
(3 credits)

Prerequisite: PHYS 335 or equivalent. Partial differential equations, eigenfunction expansion and finite transforms, Laplace, Poisson, wave and diffusion equations, applications, special functions, boundary value problems, Sturm-Liouville

theory, Bessel functions, Legendre and Hermite polynomials, spherical harmonics, Green's function and applications, perturbation theory, (variational theory). Lectures only.

NOTE: Students who have received credit for PHYS 336 may not take this course for credit.

PHYS 458 *Advanced Electrodynamics*
(3 credits)

Prerequisite: PHYS 254, 436. Electrostatic boundary-value problem and Green's function, Maxwell's equation, energy-momentum tensor, guided waves, dielectric wave guides, fibre optics, radiation static field, multipole radiation, velocity and acceleration field, Larmor's formula, relativistic generalization, radiating systems, linear antenna, aperture in wave guide, Thomson scattering, bremsstrahlung, Abraham-Lorentz equation, Breit-Wigner formula, Green's function for Helmholtz's equation, Noether's theorem. Lectures only.

NOTE: Students who have received credit for PHYS 456 or 457 may not take this course for credit.

PHYS 466 *Nuclear Physics* (3 credits)

Prerequisite: PHYS 364; PHYS 477 previously or concurrently. Introduction, quantum mechanical properties of the nucleus, nuclear mass and shape, nuclear models, radioactivity, alpha, beta and gamma radiation, nuclear models, nuclear fission, parity violation, fundamental forces, strong and weak interaction, conservation laws, quark model and quantum chromodynamics. Lectures only.

NOTE: Students who have received credit for PHYS 465 may not take this course for credit.

PHYS 467 *Solid State Physics* (3 credits)

Prerequisite: PHYS 477 previously or concurrently. Crystal structure of solids. Lattice dynamics. Specific heat. Electrons in metals. Free-electron theory of conduction. Band theory. Semi-conductors. Dielectric and magnetic properties of solids. Lectures only.

PHYS 477 *Quantum Mechanics I*
(3 credits)

Prerequisite: PHYS 335, 346, 364. Introduction, state function, linear momentum, momentum space configuration, momentum space operators, free particle motion, Dirac notation, Schrödinger's equation, Hermitian operators, parity and symmetry of state function, harmonic oscillator, creation and annihilation operators, first and second order time independent perturbation theory.

PHYS 478 *Quantum Mechanics II*
(3 credits)

Prerequisite: PHYS 477. Particle states, classification of symmetry, parity, numerical solution

of Schrödinger's equation, WKB approximation, variational method, alpha decay probability, time-dependent perturbation theory, systems of particles in one dimension, interacting particles, identical particles, Pauli exclusion Principle, Motion in three dimensions, hydrogen atom, angular momentum and spin, Pauli spin matrices, Dirac's relativistic wave equation.

PHYS 480 *Directed Readings in Theoretical Physics* (3 credits)

Prerequisite: Permission of the Department. A course for advanced students in which a special topic, selected in consultation with a faculty member, is studied in depth.

PHYS 491 *Experimental Microprocessor Interfacing* (3 credits)

Prerequisite: PHYS 390; PHYS 391 or equivalent. Address decoding, multiplexing, and demultiplexing with TTL integrated circuits. Address decoding circuits, drivers, and receivers. Parallel, serial and non-TTL I/O. Breadboarding, wire-wrapping, and soldering techniques. The use of oscilloscopes, logic probes, and computers for circuit troubleshooting. Drawing schematic diagrams. Timing diagrams. Data sheets. Laboratory only.

PHYS 494 *Methods of Experimental Physics* (3 credits)

Prerequisite: PHYS 290, 293, 394 or equivalent, or permission of the Department. A supervised research project which may include experiments in nuclear physics, laser and fibre-optics, solid state physics, ultrasonics, or thermal physics. A technical report is required.

PHYS 495 *Experimental Nuclear Physics*
(1 credit)

Prerequisite: PHYS 394; PHYS 466 previously or concurrently. A laboratory course in nuclear physics. Experiments include gamma- and beta-ray spectroscopy, nuclear magnetic resonance, half-life determination, nuclear activities. Laboratory only, 10 experiments.

PHYS 498 *Advanced Topics in Physics*
(3 credits)

PHYS 499 *Advanced Topics in Physics*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.240

POLITICAL SCIENCE

Faculty	<p><i>Chair</i> REETA C. TREMBLAY, <i>Associate Professor</i></p> <p><i>Professors</i> HAROLD R. CHORNEY HORST HUTTER ARTHUR KROKER GUY LACHAPELLE DANIEL SALÉE HARVEY SHULMAN</p> <p><i>Professor Emeritus</i> HENRY P. HABIB</p>	<p><i>Associate Professors</i> MARCEL DANIS BROOKE JEFFREY MABEN POIRIER EVERETT M. PRICE</p> <p><i>Assistant Professors</i> PIERRE OSTIGUY NORRIN M. RIPSAN JULIAN SCHOFIELD PETER STOETT</p>		
Location	<p><i>Sir George Williams Campus</i> Annex D, Room: 103 (514) 848-2105</p>			
Department Objectives	<p>The Department of Political Science offers a wide range of courses and programs to acquaint students with the complex workings of contemporary government and politics. The curriculum provides the theoretical foundations, analytical skills, and research methods for understanding the making of government policy as well as the underlying nature and purpose of political processes and institutions. The aim is to prepare well-rounded, concerned citizens for careers in the public service and the private sector, or for graduate or law school.</p>			
Programs	<p>Students are responsible for satisfying their particular degree requirements. <i>The superscript indicates credit value.</i></p> <table><tr><td><p>60 BA Honours in Political Science 12 POLI 202³, 204³, 205³, 206³ 6 Chosen from POLI 364³, 371³, 373³, 384³ 6 Chosen from POLI 392³ and 393³; or 372⁶ 33 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with a minimum of 12 credits at the 400 level 3 POLI 496³ (<i>Honours Seminar</i>)</p><p>42 BA Major in Political Science 12 POLI 202³, 204³, 205³, 206³ 30 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with at least six credits at the 400 level</p></td><td><p>24 Minor in Political Science 12 POLI 202³, 204³, 205³, 206³ 12 Chosen from any of the five groups in Political Science. A minimum of nine credits must be taken at the 300 or 400 level.</p></td></tr></table> <p>The Department of Political Science offers the following programs of study: an Honours, a Major, and a Minor.</p> <p>In order to maintain Honours status, students must obtain approval for their programs from the Honours adviser each year, prior to registration. In the second year of the Honours program, each student will choose a faculty adviser to advise the student on course selection and seminar research essays.</p> <p>The program of courses leading to a Minor in Political Science consists of 24 credits in the Department. The Minor is designed to provide an opportunity for students to make a combination with a Specialization, a Major, or Honours in another discipline. A student's Minor will be arranged in consultation with the Department of Political Science so that it relates to courses in the Major area of study.</p>		<p>60 BA Honours in Political Science 12 POLI 202³, 204³, 205³, 206³ 6 Chosen from POLI 364³, 371³, 373³, 384³ 6 Chosen from POLI 392³ and 393³; or 372⁶ 33 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with a minimum of 12 credits at the 400 level 3 POLI 496³ (<i>Honours Seminar</i>)</p> <p>42 BA Major in Political Science 12 POLI 202³, 204³, 205³, 206³ 30 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with at least six credits at the 400 level</p>	<p>24 Minor in Political Science 12 POLI 202³, 204³, 205³, 206³ 12 Chosen from any of the five groups in Political Science. A minimum of nine credits must be taken at the 300 or 400 level.</p>
<p>60 BA Honours in Political Science 12 POLI 202³, 204³, 205³, 206³ 6 Chosen from POLI 364³, 371³, 373³, 384³ 6 Chosen from POLI 392³ and 393³; or 372⁶ 33 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with a minimum of 12 credits at the 400 level 3 POLI 496³ (<i>Honours Seminar</i>)</p> <p>42 BA Major in Political Science 12 POLI 202³, 204³, 205³, 206³ 30 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with at least six credits at the 400 level</p>	<p>24 Minor in Political Science 12 POLI 202³, 204³, 205³, 206³ 12 Chosen from any of the five groups in Political Science. A minimum of nine credits must be taken at the 300 or 400 level.</p>			

CORE PROGRAM

	POLI 202 Introduction to Political Science (3 credits)	POLI 205 Introduction to International Politics (3 credits)
	POLI 204 Introduction to Canadian Politics (3 credits)	POLI 206 Introduction to Western Political Theory (3 credits)
<i>Group 1: International Politics</i>	POLI 213 Contemporary Issues in Global Politics (3 credits)	POLI 388 Human Rights and International Justice (3 credits)
	POLI 303 Globalization, Identity and the State (3 credits)	POLI 391 Middle East and Global Conflict (3 credits)
	POLI 305 International Political Economy (3 credits)	POLI 394 Globalization and Sustainable Development (3 credits)
	POLI 306 State and Devolution (3 credits)	POLI 419 Strategic Studies (3 credits)
	POLI 307 Regional Integration and the Nation State (3 credits)	POLI 421 Transnational Politics (3 credits)
	POLI 311 International Public Law (3 credits)	POLI 422 Canadian Foreign Policy (3 credits)
	POLI 315 International Organizations (3 credits)	POLI 423 Peace Studies and Global Governance (3 credits)
	POLI 329 American Foreign Policy (3 credits)	POLI 486 Advanced Seminar in International Relations (3 credits)
	POLI 332 Theories of International Relations (3 credits)	
	POLI 338 Foreign Policy Making and Diplomatic Relations (3 credits)	
<i>Group 2: Comparative Politics</i>	POLI 301 Social Movements and Protest Politics (3 credits)	POLI 366 Politics of Africa (3 credits)
	POLI 310 Politics of the U.S. (3 credits)	POLI 379 Politics of Latin America (3 credits)
	POLI 319 European Politics and Government (3 credits)	POLI 380 Comparative Public Administration and Bureaucracy (3 credits)
	POLI 323 Politics of Eastern Europe (3 credits)	POLI 395 Politics of the Middle East (3 credits)
	POLI 326 Women, Ethics and the Law in Canada (3 credits)	POLI 424 India: State and Societal Relations (3 credits)
	POLI 328 Public Policy and the Politics of Equality (3 credits)	POLI 481 Issues in Western European Politics (3 credits)
	POLI 333 Politics of Russia (3 credits)	POLI 482 State and Society in Asia (3 credits)
	POLI 335 Politics of China (3 credits)	POLI 483 State and Society in Latin America (3 credits)
	POLI 336 Politics of South Asia (3 credits)	POLI 484 Post-Communist Societies and States in Transition (3 credits)
	POLI 337 Politics of Japan (3 credits)	POLI 485 Issues in Development and Democracy (3 credits)
	POLI 344 Comparative Political Analysis (3 credits)	POLI 487 Advanced Seminar in Comparative Politics (3 credits)
	POLI 352 Comparative Urban Politics and Government (3 credits)	
<i>Group 3: Canadian and Québec Politics</i>	POLI 211 Québec Politics and Society/ La vie politique québécoise (3 credits)	POLI 350 Canadian and Québec Law (6 credits)
	POLI 308 Canadian Politics and Society (3 credits)	POLI 351 Canadian Federalism (3 credits)
	POLI 309 Women and Politics in Canada (3 credits)	POLI 355 Nationalism: The Canadian Experience (3 credits)
	POLI 318 Citizen Participation in the Political Process (3 credits)	POLI 356 Canadian Political Parties (3 credits)
	POLI 322 Immigration and Citizenship (3 credits)	POLI 363 Issues in Canadian Public Policy (3 credits)
	POLI 326 Women, Ethics and the Law in Canada (3 credits)	POLI 365 Canadian Public Administration (3 credits)
	POLI 328 Public Policy and the Politics of Equality (3 credits)	POLI 367 Québec Public Administration (3 credits)
	POLI 349 Political and Social Theory and the City (3 credits)	POLI 438 Comparative Provincial Politics in Canada (3 credits)
		POLI 488 Advanced Seminar in Canadian and Québec Politics (3 credits)

*Group 4:
Public Policy and
Administration*

POLI 212	Politics and Economy (3 credits)	POLI 363	Issues in Canadian Public Policy (3 credits)
POLI 305	International Political Economy (3 credits)	POLI 365	Canadian Public Administration (3 credits)
POLI 320	Development of Western Legal Systems (3 credits)	POLI 367	Québec Public Administration (3 credits)
POLI 328	Public Policy and the Politics of Equality (3 credits)	POLI 380	Comparative Public Administration and Bureaucracy (3 credits)
POLI 330	Principles of Public Administration (3 credits)	POLI 394	Globalization and Sustainable Development (3 credits)
POLI 338	Foreign Policy Making and Diplomatic Relations (3 credits)	POLI 461	The State and Economic Life (3 credits)
POLI 349	Political and Social Theory and the City (3 credits)	POLI 463	Government and Business in Canada (3 credits)
POLI 352	Comparative Urban Politics and Government (3 credits)	POLI 480	Comparative Public Policy (3 credits)
POLI 361	Government, Society and Public Purpose (3 credits)	POLI 489	Advanced Seminar in Public Policy and Evaluation (3 credits)
POLI 362	Policy Analysis and Program Evaluation (3 credits)		

*Group 5:
Political Theory*

POLI 326	Women, Ethics and the Law in Canada (3 credits)	POLI 387	The American Political Tradition (3 credits)
POLI 349	Political and Social Theory and the City (3 credits)	POLI 390	Ethics and Competing Political Perspectives (3 credits)
POLI 361	Government, Society and Public Purpose (3 credits)	POLI 392	Survey and Research Design (3 credits)
POLI 364	Hellenistic, Roman, Medieval Political Philosophy (3 credits)	POLI 393	Empirical Research Methods (3 credits)
POLI 368	Media, Technology and Politics (3 credits)	POLI 420	Contemporary French Political Thought (3 credits)
POLI 371	Early Modern Political Philosophy (3 credits)	POLI 433	Critics of Modernity (3 credits)
POLI 372	Political Science and Scientific Method (6 credits)	POLI 435	Marxist and Neo-Marxist Political Thought (3 credits)
POLI 373	Late Modern Political Philosophy (3 credits)	POLI 461	The State and Economic Life (3 credits)
POLI 375	Nationalism: Origins, Operation, and Significance (3 credits)	POLI 471	Political Thought and Ideology in Canada (3 credits)
POLI 384	Principles of Political Theory (3 credits)	POLI 473	Political Theory and Historical Understanding (3 credits)
POLI 386	Contemporary Liberalism and Its Critics (3 credits)	POLI 490	Advanced Seminar in Political Theory (3 credits)

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.: Explanation of course numbers and the core program:

1. Political Science Honours, Major students should normally complete the 12-credit core program in their first year of full-time equivalent studies. MEP and ECP students must consult an academic adviser regarding the completion of the 12-credit core.
2. Courses at the 200 and 300 level are open to all students in other departments and faculties.
NOTE: 200-level courses are introductory, 300-level courses require the ability to do independent research and to write analytical essays.
3. Courses at the 400 level are taught as seminars and are generally open to students who have successfully completed 24 university credits, three of which are at the 300 level in Political Science.

POLI 202 *Introduction to Political Science* (3 credits)

This course seeks to develop a broad basis from which to pursue further political inquiry. It offers an introductory examination of basic ideas regarding the state, power, authority, and systems of government. The course examines the diverse approaches to the specific study of political phenomena and provides a fundamental

understanding of political concepts.

NOTE: Students who have received credit for POLI 200 or 201 or 203 may not take this course for credit.

POLI 204 *Introduction to Canadian Politics* (3 credits)

This course is a basic introduction to the fundamental issues of Canadian public life and

the federal political system. It presents an overview of the constitution, institutions, political parties, electoral system, interest groups, and public opinion that represent the essential components of Canada's political culture and government.

NOTE: Students who have received credit for POLI 232 or 234 or 250 may not take this course for credit.

POLI 205 *Introduction to International Relations* (3 credits)

This course introduces the principal themes, terms, concepts, and debates in the contemporary study of international relations. It provides an historical analysis of global politics and international economy.

NOTE: Students who have received credit for POLI 207 or 208 or 210 may not take this course for credit.

POLI 206 *Introduction to Western Political Theory* (3 credits)

This course explores the foundations and basic principles of Western political theory in ancient Greece. It covers concepts such as democracy and oligarchy, justice and the good life by way of a careful reading of texts by Greek tragedians, historians, and philosophers. Texts studied in the course may include writings by Aeschylus or Sophocles and Thucydides, as well as Plato and Aristotle.

NOTE: Students who have received credit for POLI 270 or 271 may not take this course for credit.

POLI 211 *Québec Politics and Society/ La vie politique québécoise* (3 credits)

This course is a study of the changing party structure and political issues in Québec and their relationship to constitutional, cultural, and economic factors.

On étudiera dans ce cours l'évolution structurelle des partis et des questions politiques au Québec en fonction de facteurs d'ordre constitutionnel, culturel et économique.

NOTE: Students who have received credit for POLI 353 may not take this course for credit.

NOTE: The course will be offered in both English and French on a rotational basis. Please consult the Undergraduate Class Schedule for details.

POLI 212 *Politics and Economy* (3 credits)

This course is a general introduction to the interaction between politics and economy. It focuses on the impact of international and national economic structures on domestic political systems.

POLI 213 *Contemporary Issues in Global Politics* (3 credits)

This course introduces students to major trends and issues in world politics, such as human

rights, refugees, ethnic conflict, environmental degradation, migration, and the peacekeeping role of the U.N.

POLI 298 *Selected Topics in Political Science* (3 credits)

POLI 299 *Selected Topics in Political Science* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 301 *Social Movements and Protest Politics* (3 credits)

This course surveys the politics of selected contemporary movements such as environmentalism, peace, human rights, and feminism. It also provides a comparative analysis of the politics of dissent.

POLI 303 *Globalization, Identity and the State* (3 credits)

This course examines the impact of globalization on state sovereignty and state autonomy, citizenship, and the underlying social and political processes. It addresses the issue of the changing nature of the nation state, and of identity-based politics.

POLI 305 *International Political Economy* (3 credits)

This course examines the processes and issues in the politics of international economic relations. Topics covered include the role of multinational corporations, the rise of trading blocs, and the international division of labour.

POLI 306 *State and Devolution* (3 credits)

This course compares the varied approaches to the devolution of power within the nation state occasioned by centralizing and decentralizing forces. State devolution is considered comparatively within both advanced industrial nations and the newly developed societies.

POLI 307 *Regional Integration and the Nation State* (3 credits)

This course studies international structural integration. Among the topics covered are: the dynamics of socio-political unification; theories of regionalism; supranational communities; common markets.

NOTE: Students who have received credit for POLI 317 may not take this course for credit.

POLI 308 *Canadian Politics and Society* (3 credits)

This course presents a comprehensive analysis of the major issues within the Canadian political process and considers the formal and informal institutions within which these issues are addressed. The political system is studied within the context of federalism, the electoral system, political parties, interest groups, public opinion, and the Canadian political culture.

POLI 309 *Women and Politics in Canada*
(3 credits)

This course examines the role of women in Canadian politics at the federal, provincial, and local level. Historical, theoretical, and legal perspectives are examined and include the politics of racism; sexuality; community organizing; suffrage; and representation within formal political structures. It focuses on the diversity and development of the women's movement in Canada.

NOTE: Students who have received credit for POLI 275 may not take this course for credit.

POLI 310 *Politics of the U.S.* (3 credits)

This course surveys the structures and dynamics that inform the contemporary American political process. In addition to studying the traditional governmental institutions, the course aims to provide a foundation for understanding and critically analysing public opinion, the media and elections, federalism, political parties and interest groups, civil rights and civil liberties, and current issues in public policy.

NOTE: Students who have received credit for POLI 327 may not take this course for credit.

POLI 311 *International Public Law*
(3 credits)

This course explores the meaning, effectiveness, and potential of interstate law. Among the topics covered are: the source and development of international law; the role of the International Court of Justice; sovereignty, territory, and natural resources; human rights violations, the state and war crimes tribunals; and international environmental law.

POLI 315 *International Organizations*
(3 credits)

This course offers an overview of international institutions, including the League of Nations, the United Nations and its agencies, and regional organizations. The course considers whether such institutions are gradually replacing the state as providers of security, and examines theoretical orientations toward international regimes.

POLI 318 *Citizen Participation in the Political Process* (3 credits)

This course examines the causes and implications of political participation by individuals in Canada. Topics to be covered include citizen participation in election campaigns and elections, party organizations, protest movements, interest groups, lobbying and community associations. The course is organized to answer three basic questions: who participates in politics in Canada, why do they do so, and how do they choose to become involved?

POLI 319 *European Politics and Government* (3 credits)

This course is a study of government and

politics in selected European countries. It provides an analysis of political institutions, cultures, and processes.

POLI 320 *Development of Western Legal Systems* (3 credits)

This course is an overview of the major legal systems of the Western world, with special emphasis on the political decisions which influenced their growth and direction. It will study the development of Roman law, Romano-Germanic law, and English common law.

POLI 322 *Immigration and Citizenship*
(3 credits)

This course examines the concepts of equality, rights, citizenship, and public interest and relates these themes to immigration policies in Canada.

POLI 323 *Politics of Eastern Europe*
(3 credits)

This course studies the political process and institutions of the region, with a special focus on the recent transformation relating to economic problems, social structures, culture, and ethnic conflicts, as well as the role of governmental policies in domestic and foreign affairs.

POLI 326 *Women, Ethics and the Law in Canada* (3 credits)

The course provides an analysis of applied ethics to the study of women and the law in Canada. The course identifies and examines ethical problems addressed by feminist theorists that arise in the realm of public law. Diverse approaches to the study of ethics and the efficacy of legal moral imperatives will be assessed. Ethical issues examined include human rights, family law, pornography, abortion, and reproductive technologies.

NOTE: Students who have received credit for POLI 314 or 334 may not take this course for credit.

POLI 328 *Public Policy and the Politics of Equality* (3 credits)

This course reviews theoretical debates about the role of the state and the individual, collective and individual rights, integration, and the role of cultural diversity and identity. It examines selected policy demands of women, the poor, refugees, and other constituencies.

NOTE: Students who have received credit for POLI 316 or 334 may not take this course for credit.

POLI 329 *American Foreign Policy*
(3 credits)

A course in the role of the United States in the world. The course considers the strategic position and superpower status of the U.S.A. through its foreign policy and its diplomatic relations with other countries.

POLI 330 *Principles of Public Administration* (3 credits)

This course examines the theory and practice of

public administration in Canada. The nature of accountability in public sector environments is reviewed in order to study how policy is developed, implemented, and evaluated by bureaucracies, central agencies, and the legislative branches of government.

NOTE: Students who have received credit for POLI 260 may not take this course for credit.

POLI 332 *Theories of International Relations* (3 credits)

This course is an introduction to the field of theories in international relations. It examines the development of knowledge from the classical paradigm to the most contemporary frames of analysis.

POLI 333 *Politics of Russia* (3 credits)

This course is a study of the government and politics of the old and the new Russia, including emerging political, social, and economic structures, conflicts, and issues.

POLI 335 *Politics of China* (3 credits)

This course focuses on political development of China. Topics include political mobilization, economic development, democracy, and the policy process.

POLI 336 *Politics of South Asia* (3 credits)

This course comparatively examines the political systems of South Asian countries in light of their socio-economic environment. Specific emphasis is placed on four countries — India, Pakistan, Bangladesh, and Sri Lanka. After a comprehensive study of the social and political structure of these countries, agrarian and industrial policies are evaluated.

NOTE: Students who have received credit for POLI 340 may not take this course for credit.

POLI 337 *Politics of Japan* (3 credits)

This course focuses on the political development of Japan since the end of World War II. Emphasis is placed on Japanese modernization, post-industrial politics, national security and constitutional pacifism.

POLI 338 *Foreign Policy Making and Diplomatic Relations* (3 credits)

This course studies the substance, formulation, and implementation of foreign policy in selected countries. Special attention is paid to theoretical frameworks, inputs in decision-making, policy evaluation, diplomatic establishment, diplomatic negotiation, treaty-making, and conference diplomacy.

NOTE: Students who have received credit for POLI 412 may not take this course for credit.

POLI 344 *Comparative Political Analysis* (3 credits)

This course deals with theoretical aspects of comparative politics. Topics include: terms and

concepts of political analysis; theories of modernization and political development; dependency; corporatism, and state autonomy.

POLI 349 *Political and Social Theory and the City* (3 credits)

This course examines the theoretical and ideological aspects of city government in historical and normative perspective.

NOTE: Students who have received credit for POLI 336 may not take this course for credit.

POLI 350 *Canadian and Québec Law* (6 credits)

This course is an introduction to Canadian and Québec law. It emphasizes certain areas of criminal law, the Canadian Charter of Rights and Freedoms, and Québec civil law. An analysis is undertaken of the criminal court structure and criminal procedure, legal constitutional rights; the civil court structure and civil court procedures.

NOTE: Students who have received credit for POLI 240 or 241 or 243 may not take this course for credit.

POLI 351 *Canadian Federalism* (3 credits)

This course is a critical and analytical study of the theory of federalism, its principles, and techniques, and the response of Canadian federal systems to the demands of cultural dualism and regional pressures.

POLI 352 *Comparative Urban Politics and Government* (3 credits)

This course deals with politics and government in selected Canadian cities, with comparative reference to cities elsewhere in the world.

NOTE: Students who have received credit for POLI 336 may not take this course for credit.

POLI 355 *Nationalism: The Canadian Experience* (3 credits)

This course examines the origins and development of nationalism and regionalism in Canada. It compares nationalist and regionalist sentiments in Canada with those of European countries.

POLI 356 *Canadian Political Parties* (3 credits)

This course provides a comprehensive examination of the origins and development of political parties in Canada at both the federal and provincial levels. Theories about party development, including one party dominance, brokerage politics and third party development, are examined in order to determine the efficacy of political parties.

POLI 361 *Government, Society and Public Purpose* (3 credits)

This course is an examination of the broad social, economic, political, and cultural forces shaping governmental decisions and policies. Particular attention is paid to the conflict between private and public concerns.

POLI 362 Policy Analysis and Program Evaluation (3 credits)

This course provides a basic understanding of various approaches to policy planning and policy evaluation. Special emphasis is placed on various conceptual, methodological, and ethical issues emergent in the evaluation of governmental policy performance.

POLI 363 Issues in Canadian Public Policy (3 credits)

The course examines alternative public policies in selected areas at the federal, provincial, and municipal levels in Canada. Policies analysed vary from year to year and include such areas as: social welfare, culture, education, language, environmental protection, energy conservation, urban renewal, and economic policy.

POLI 364 Hellenistic, Roman, Medieval Political Philosophy (3 credits)

This course examines the political teachings of the Hellenistic schools such as the Academics, the Stoics, the Epicureans and the Skeptics. It traces these teachings through their reception in the republican theory of Cicero. It then follows their transformation into the political thinking of Christian authors such as St. Augustine.

NOTE: Students who have received credit for POLI 270 or 273 may not take this course for credit.

POLI 365 Canadian Public Administration (3 credits)

This course examines the organization and composition of the federal bureaucracy, the role of the bureaucracy in the making and implementation of public policy, patterns of recruitment, and the mechanisms of accountability and control.

POLI 366 Politics of Africa (3 credits)

This course is a comparative study of political institutions and processes in selected African countries. Countries selected may vary from year to year.

NOTE: Students should consult the departmental handbook for current topic.

NOTE: Students who have received credit for POLI 343 or 345 may not take this course for credit.

POLI 367 Québec Public Administration (3 credits)

This course examines the organization and composition of Québec bureaucracy, the role of civil servants and the making and implementation of public policy, patterns of recruitment, and the mechanisms of accountability and control.

POLI 368 Media, Technology and Politics (3 credits)

This course examines the impact upon politics of changes in technology and media, as well as discussing a diverse range of contemporary thinkers and their understanding of the digital

future. Particular attention is paid to the age of electronic politics and its impact upon the actual practice of political power.

NOTE: Students who have received credit for POLI 472 may not take this course for credit.

POLI 371 Early Modern Political Philosophy (3 credits)

This course studies the origins of modern political thought in the thinkers of the Renaissance and the Reformation. It examines the rise of modern individualism in the writings of thinkers such as Machiavelli, Luther, Calvin, Bodin, Hobbes, and Harrington.

POLI 372 Political Science and Scientific Method (6 credits)

This course focuses on contemporary interpretations of reasoning by natural scientists (i.e. empiricism, philosophical relativism and philosophical realism), and inquires into the implications of each of these interpretations for the study of the social sciences in general and political science in particular.

NOTE: Students who have received credit for POLI 382 or 383 or 474 may not take this course for credit.

POLI 373 Late Modern Political Philosophy (3 credits)

This course examines the philosophy of the Enlightenment and its critics, as well as the political thought of the early industrial period. The thinkers studied may include Locke, Montesquieu, Hume, Rousseau, and John Stuart Mill.

POLI 375 Nationalism: Origins, Operation, and Significance (3 credits)

Using specific case studies, this course examines the theories of nationalism developed originally in the early nineteenth century as a purely European phenomenon. It relates the rise of nationalism to the processes of modernization.

POLI 379 Politics of Latin America (3 credits)

This course studies the political structures and processes of selected countries in South America, Central America, and the Caribbean. Countries selected may vary from year to year.

NOTE: Students should consult the departmental handbook for current topic.

NOTE: Students who have received credit for POLI 346 or 348 may not take this course for credit.

POLI 380 Comparative Public Administration and Bureaucracy (3 credits)

This course deals with the theories and the development of public administration within a comparative context. Using a Weberian framework of bureaucracy, the course critically evaluates the formal-rational concepts of

bureaucracy in relation to case studies of public services in Europe and the new bureaucratic structures developed in other countries.

NOTE: Students who have received credit for POLI 360 may not take this course for credit.

POLI 384 *Principles of Political Theory*
(3 credits)

This course is an intensive study of a basic work by a major thinker such as Plato, Aristotle, Machiavelli, Hobbes or Hegel. It examines a major text such as Plato's *Laws* or Hegel's *Phenomenology* as well as commentaries on it, while attempting to explore systematically the issues and problems raised by the text and the interpretative traditions that follow from it.

NOTE: Students who have received credit for POLI 370 may not take this course for credit.

POLI 386 *Contemporary Liberalism and Its Critics* (3 credits)

This course discusses the political, cultural, and social consequences of classical liberalism and neo-liberalism from the critical viewpoints of a range of contemporary political thinkers. Themes related to globalization, the meaning of the classical liberal idea of the individual in an increasingly "networked" society, and the triumph of the virtual class are important parts of the discussion.

POLI 387 *The American Political Tradition* (3 credits)

This course is an examination of documents and texts that shape the origin, development, and relationship between American thought and the American political process. Selected readings from the Declaration of Independence, the Articles of Confederation, the Constitution, the Federalist Papers, Thomas Jefferson, Alexis de Tocqueville and John C. Calhoun, are required.

POLI 388 *Human Rights and International Justice* (3 credits)

This course surveys normative questions comprising human rights discourse, with an emphasis on international efforts to promote human rights standards. Topics include the role of the United Nations, the North-South debate, environmental security, the obligation of individuals and states, women's rights and the work of non-governmental organizations. Special consideration is given to the controversy between the universal and particular applications of human rights.

POLI 390 *Ethics and Competing Political Perspectives* (3 credits)

This course focuses on competing ethical perspectives in contemporary political life. A wide range of ethical issues are discussed, which may include, for example, aboriginal claims, pay equity and violence in the media, civil liberties and the Internet, gender debates, reproductive technology, bio-tech and the fate of the "body" in the 21st century. This course seeks to clarify the origins of political thought and the consequences in political practice of clashing ethical perspectives.

POLI 391 *Middle East and Global Conflict* (3 credits)

This course is a study of the Middle East in transition, conflict and ideology in a global context of changing regional alliances. Topics include regional conflicts such as the Arab-Israeli conflict, the Iraq-Iran war, the Gulf crisis, foreign policy process, and the end of the cold war and its impact in the new millennium.

POLI 392 *Survey and Research Design*
(3 credits)

This course studies the logic and methodology of political science research, the formulation of hypotheses, and the preparation of research design.

NOTE: Students who have received credit for POLI 374 or 376 may not take this course for credit.

POLI 393 *Empirical Research Methods*
(3 credits)

Prerequisite: POLI 392. This course presents quantitative methods of data collection and analysis, and introduces students to SPSS (statistical package for social science).

NOTE: Students who have received credit for POLI 374 or 378 may not take this course for credit.

POLI 394 *Globalization and Sustainable Development* (3 credits)

This course is an introduction to the emerging field of global environmental politics. It surveys the present environmental crisis and the roles of states, international organizations, and civil society. Various case studies dealing with oceans, forests, fisheries, biodiversity, global warming, and others are used to illustrate the inherent complexity of transnational ecological issues in the era of globalization.

NOTE: Students who have received credit for POLI 385 may not take this course for credit.

POLI 395 *Politics of the Middle East*
(3 credits)

This course is a comparative study of the government and politics of Arab North Africa, the Fertile Crescent, and the Arabian peninsula. Countries and topics covered may vary from year to year.

NOTE: Students should consult the departmental handbook for current topic.

POLI 398 *Selected Topics in Political Science* (3 credits)

POLI 399 *Selected Topics in Political Science* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 419 *Strategic Studies* (3 credits)

Prerequisite: See N.B. number (3). This seminar deals with military studies and security policies. It covers the history of military strategies and theories of war.

POLI 420 *Contemporary French Political Thought* (3 credits)

Prerequisite: See N.B. number (3). This seminar examines the tradition of French thought, through the writings of a single political theorist, or through a discussion of competing intellectual perspectives. Some of the leading figures discussed are Baudrillard, Deleuze, Guattari, Foucault, Lyotard, Barthes, Camus, Cizous, Irigaray, Sartre, and Virilio. The seminar explores French thought for its contribution to a critical and eloquent analysis of the post-modern scene.

POLI 421 *Transnational Politics* (3 credits)

Prerequisite: See N.B. number (3). This seminar examines various alternatives such as regime theory, world systems theory, and emerging theories about global civil society. It examines liberal transnationalist thought from Kant to contemporary understandings of globalization, including ideas about technological convergence and renewed cultural divergence. The implications of non-state-centric perspectives for world politics and foreign policy are discussed.

POLI 422 *Canadian Foreign Policy* (3 credits)

Prerequisite: See N.B. number (3). This course examines Canada's foreign policy. In this seminar, particular emphasis is given to the decision-making process by which foreign policy is formulated and implemented, with particular reference to Canadian relations vis-à-vis the United States, the Commonwealth, and the developing countries.

NOTE: Students who have received credit for POLI 359 may not take this course for credit.

POLI 423 *Peace Studies and Global Governance* (3 credits)

Prerequisite: See N.B. number (3). This seminar focuses on the theory and practice of peace amongst nations. The course begins with a survey of analyses explaining the causes of aggression, war and peace, including theories of structural violence and revolution; nationalism and cosmopolitanism. It then examines the roles played by the state, international organizations, and peace movements, focusing on global and regional disarmament initiatives and peacekeeping.

NOTE: Students who have received credit for POLI 417 may not take this course for credit.

POLI 424 *India: State and Societal Relations* (3 credits)

Prerequisite: See N.B. number (3). This seminar examines state-societal relations in post-independence India. Topics covered include electoral politics, religious nationalism, economic and social policies, and women and politics in India.

NOTE: Students who have received credit for POLI 431 may not take this course for credit.

POLI 433 *Critics of Modernity* (3 credits)

This seminar studies selected writings by major critics of modernity during the twentieth century.

The authors studied may include Hannah Arendt, Albert Camus, Fyodor Dostoevsky, George Grant, Bertrand de Jouvenel, Alasdair MacIntyre, Jacques Maritain, Richard Niebuhr, Michael Oakeshott, Leo Strauss, Charles Taylor, and Eric Voegelin.

NOTE: Students who have received credit for POLI 470 may not take this course for credit.

POLI 435 *Marxist and Neo-Marxist Political Thought* (3 credits)

Prerequisite: See N.B. number (3). This seminar undertakes a critical examination of the major texts of Marx and Engels, and a study of representative selections of Neo-Marxist thinkers such as Gramsci, Althusser, Miliband and Poulantzas.

NOTE: Students who have received credit for POLI 475 may not take this course for credit.

POLI 438 *Comparative Provincial Politics in Canada* (3 credits)

Prerequisite: See N.B. number (3). This seminar analyses the regional political cultures in Canada; the development of provincial political parties and public administrations, the rise of third parties, and electoral behaviour and provincial public opinion.

NOTE: Students who have received credit for POLI 453 may not take this course for credit.

POLI 461 *The State and Economic Life* (3 credits)

Prerequisite: See N.B. number (3). This seminar examines the development of the welfare state and the forces contributing to the expansion of government intervention in the economy. Particular attention is devoted to the causal interdependence among values, political power, wealth, the general pattern of social stratification, and economic development.

POLI 463 *Government and Business in Canada* (3 credits)

Prerequisite: See N.B. number (3). This seminar in public policy is designed to explore the relationship between government and business in Canada. Particular attention is paid to the formation and implementation of policy intended to promote and control enterprise, and the role of government as entrepreneur.

POLI 471 *Political Thought and Ideology in Canada* (3 credits)

Prerequisite: See N.B. number (3). This seminar explores key Canadian political ideologies: liberalism, conservatism, socialism, populism, and social democracy through the writings of important contributors, past and present, to the tradition of Canadian political thought. The authors studied may include George Grant, Harold Innes and Marshall McLuhan.

POLI 473 *Political Theory and Historical Understanding* (3 credits)

Prerequisite: See N.B. number (3). This is a

seminar on the relation between historical understanding and political thought. The authors studied may include Hannah Arendt, Michael Oakshott, J.G.A. Pocock, and Quentin Skinner.

POLI 480 *Comparative Public Policy*
(3 credits)

Prerequisite: See N.B. number (3). This seminar is a comparative analysis of some of the major policy problems confronting both industrially advanced and developing societies. The underlying objective of the seminar is to critically evaluate how similar problems are approached by different political systems.

NOTE: Students who have received credit for POLI 462 may not take this course for credit.

POLI 481 *Issues in Western European Politics* (3 credits)

Prerequisite: See N.B. number (3). This seminar examines the nature of politics of the states and societies of Western Europe, including the significance of their membership in the European Union.

NOTE: Students who have received credit for POLI 432 may not take this course for credit.

POLI 482 *State and Society in Asia*
(3 credits)

Prerequisite: See N.B. number (3). This seminar course examines the nature of politics in Asia. A specific focus is placed on selective issues of state-society relations, the emergence of new political forces and institutions in response to changes in the socio-economic structure of the region.

NOTE: Students who have received credit for POLI 434 may not take this course for credit.

POLI 483 *State and Society in Latin America* (3 credits)

Prerequisite: See N.B. number (3). This seminar examines the nature of politics in Latin America. A specific focus is placed on selective issues of state-society relations, and the emergence of new political forces and institutions in response to changes in the socio-economic structure of the region.

POLI 484 *Post-Communist Societies and States in Transition* (3 credits)

Prerequisite: See N.B. number (3). This seminar reviews the post-communist states' transition to democracy and their state-formation. The seminar focuses on the interplay between the forces of nationalism, ethnicity, identity, and the transition to democratic structures.

NOTE: Students who have received credit for POLI 437 may not take this course for credit.

POLI 485 *Issues in Development and Democracy* (3 credits)

Prerequisite: See N.B. number (3). This seminar focuses on the political and economic problems of the new nations. A particular emphasis is placed

on understanding the process of development and state formation within a democratic context.

POLI 486 *Advanced Seminar in International Relations*
(3 credits)

Prerequisite: See N.B. number (3).

POLI 487 *Advanced Seminar in Comparative Politics* (3 credits)

Prerequisite: See N.B. number (3).

POLI 488 *Advanced Seminar in Canadian and Québec Politics*
(3 credits)

Prerequisite: See N.B. number (3).

POLI 489 *Advanced Seminar in Public Policy and Evaluation*
(3 credits)

Prerequisite: See N.B. number (3).

POLI 490 *Advanced Seminar in Political Theory* (3 credits)

Prerequisite: See N.B. number (3).

Advanced seminars deal with selected topics in sub-fields of political science. Topics vary from year to year.

NOTE: Students should consult the departmental handbook for a description of these courses.

POLI 496 *Honours Seminar* (3 credits)

Prerequisite: Permission of the Department. This seminar involves the student in formulating an Honours research proposal, and the research and writing of an Honours paper. Topics of the seminar vary from year to year.

POLI 497 *Internship* (3 credits)

Prerequisite: Permission of the Department. The internship is a one-semester apprenticeship in some aspect of public affairs and policy analysis. Placements may be drawn from all areas of possible employment, including private sector, government and community organizations. Students are asked to submit a written report which summarizes and evaluates their work experience.

NOTE: Eligible students should have completed 39 credits in Political Science and must have an excellent academic record. The undergraduate committee of the Department will determine the eligibility of the student and will approve the internship. Students should consult the Department for further information.

POLI 498 *Advanced Topics in Political Science* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.250

PSYCHOLOGY

Faculty	<p><i>Chair</i> JUNE S. CHAIKELSON, <i>Professor</i></p> <p><i>Professor Emeritus</i> CAMPBELL PERRY</p> <p><i>Professors</i> SHIMON AMIR ZALMAN AMIT TANNIS ARBUCKLE-MAAG WILLIAM BUKOWSKI ANNA-BETH DOYLE DOLORES PUSHKAR ALEX E. SCHWARTZMAN NORMAN SEGALOWITZ LISA SERBIN PETER SHIZGAL JANE STEWART MICHAEL W. von GRÜNAU</p> <p><i>Associate Professors</i> MICHAEL BROSS MICHAEL CONWAY RICK GURNSEY JAMES E. JANS REX B. KLINE JEAN-ROCH LAURENCE SYDNEY B. MILLER DAVID MUMBY JAMES G. PFAUS DIANE POULIN-DUBOIS PETER SERAGANIAN DALE M. STACK BARBARA WOODSIDE</p> <p><i>Associate Professor of Applied Human Sciences and Psychology</i> DOROTHY MARKIEWICZ</p>	<p><i>Assistant Professors</i> C. ANDREW CHAPMAN ROBERTO DE ALMEIDA MICHEL DUGAS SCOTT GREER PAUL D. HASTINGS DARRYL B. HILL KAREN Z. LI CHANG H. LIU OLGA OVERBURY VIRGINIA B. PENHUNE NATALIE PHILLIPS TAMARHA PIERCE</p> <p><i>Adjunct Professors</i> DAVID ANDRES CHARLENE BERGER WILLIAM BENDER GABRIEL BRETON THOMAS G. BROWN SAM BURSTEIN HALLIE FRANK ALAIN GRATTON THOMAS GRAY ELIZABETH HENRIK ANTHONY HILTON SHEILAGH HODGINS W. RONALD HOOPER HERBERT LADD GABRIEL LEONARD EVA LIBMAN GEORGE NEMETH PIERRE-PAUL ROMPRÉ BRIAN SMITH JACQUES TREMBLAY ROY A. WISE CAMILLO ZACCIA</p>
Location	<p><i>Loyola Campus</i> Psychology Building, Room: PY 146-1 (514) 848-2223</p>	
Department Objectives	<p>Psychology is the scientific study of mental life, both its neurological bases and its manifestations in behaviour. Psychology also examines the factors that promote change in behaviour and mental activity.</p> <p>Through teaching and research, the Department serves the community by furthering such knowledge and applying it to promote human welfare. The commitment of faculty members to research assures that students keep up with current developments. Their involvement in community programs keeps students and faculty alike in close touch with the practical application of the discipline.</p>	
Programs	<p><i>Students are responsible for satisfying their particular degree requirements.</i> <i>The superscript indicates credit value.</i></p> <p>Students must apply to the departmental Honours adviser for formal admission to Honours programs. The application is usually made after completion of the first-year courses. Students must have a GPA of 3.5 in Psychology courses to qualify for entry to Honours.</p> <p>For additional information concerning programs and courses, students should consult the Department.</p>	

33 Core Program

- 15 PSYC 310³, 315^{3*}, 320⁶, 358³
- 9 Chosen from PSYC 322³, 326³, 331³, 370³
- 9 Chosen from PSYC 343³, 346³, 349³, 352³

**Students who have completed appropriate Quantitative Methods and Mathematics courses may qualify for exemption from PSYC 315. Application for exemption should be made to the Psychology Department. Students exempted from PSYC 315 will replace the credits with 300-level PSYC.*

66 BA Honours in Psychology

- 33 Core Program
- 3 PSYC 311³, 316³
- 6 Chosen from PSYC 344³, 347³, 350³, 353³, 359³, 361³, 362³, 365³, 367³, 368³, 369³, 396³
- 6 Chosen from PSYC 323³, 324³, 327³, 332³, 334³, 373³, 377³, 379³, 380³, 391³
- 3 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program adviser
- 6 PSYC 421³, 422³
- 6 PSYC 430⁶

66 BSc Honours in Psychology

- 33 Core Program
- 6 PSYC 311³, 316³
- 6 Chosen from PSYC 344³, 347³, 350³, 353³, 359³, 361³, 362³, 365³, 367³, 368³, 369³, 396³
- 6 Chosen from PSYC 323³, 324³, 327³, 332³, 334³, 373³, 377³, 379³, 380³, 391³
- 3 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program adviser
- 6 PSYC 421³, 422³
- 6 PSYC 430⁶

NOTE: In addition students must complete a minimum of 15 science credits outside the Department. The courses must be selected in consultation with a Psychology program adviser.
NOTE: Students must have completed an appropriate program of science prerequisites in order to be admitted to BSc programs.

66 BSc Honours in Psychology (Behavioural Neuroscience Option)

- 33 Core Program
- 6 PSYC 311³, 316³
- 12 Chosen from PSYC 359³, 361³, 362³, 365³, 367³, 368³, 369³
- 12 PSYC 421³, 422³, 430⁶
- 3 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program adviser
- An additional 21 Science credits as specified below:
 - 9 CHEM 221³, 222³, 271³
 - 3 BIOL 225³ or 226³
 - 9 Chosen from BIOL 225³, 226³, 227³, 261³, 266³, 321³, 335³, 364³, 367³, 383³, 435³, 462³, 483³; CHEM 478³

60 BA Specialization in Psychology

- 33 Core Program
- 3 PSYC 316³
- 6 Chosen from PSYC 344³, 347³, 350³, 353³, 359³, 361³, 362³, 365³, 367³, 368³, 369³, 396³
- 6 Chosen from PSYC 323³, 324³, 327³, 332³, 334³, 373³, 377³, 379³, 380³, 391³
- 12 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program adviser

60 BSc Specialization in Psychology (Behavioural Neuroscience Option)

- 33 Core Program
- 3 PSYC 316³
- 12 Chosen from PSYC 359³, 361³, 362³, 365⁶, 367³, 368³, 369³
- 12 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program adviser
- An additional 21 Science credits as specified below:
 - 9 CHEM 221³, 222³, 271³
 - 3 BIOL 225³ or 226³
 - 9 Chosen from BIOL 225³, 226³, 227³, 261³, 266³, 321³, 335³, 364³, 367³, 383³, 435³, 462³, 483³; CHEM 478³

60 BSc Specialization in Psychology

- 33 Core Program
- 3 PSYC 316³
- 6 Chosen from PSYC 344³, 347³, 350³, 353³, 359³, 361³, 362³, 365³, 367³, 368³, 369³, 396³
- 6 Chosen from PSYC 323³, 324³, 327³, 332³, 334³, 373³, 377³, 379³, 380³, 391³
- 12 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program adviser

NOTE: In addition students must complete a minimum of 15 science credits outside the Department. The courses must be selected in consultation with a Psychology program adviser.
NOTE: Students must have completed an appropriate program of science prerequisites in order to be admitted to BSc programs.

42 BA Major in Psychology

- 33 Core Program
- 9–12* Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program adviser

**Students who have completed appropriate Quantitative Methods and Mathematics courses may qualify for exemption from PSYC 315. Application for exemption should be made to the Psychology Department. Students exempted from PSYC 315 will replace the credits with 300-level PSYC.*

42 BSc Major in Psychology

- 33 Core Program
- 9–12* Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program adviser

**Students who have completed appropriate*

Quantitative Methods and Mathematics courses may qualify for exemption from PSYC 315. Application for exemption should be made to the Psychology Department. Students exempted from PSYC 315 will replace the credits with 300-level PSYC.

NOTE: Students must have completed an appropriate program of science prerequisites in order to be admitted to BSc programs.

NOTE: Students in programs leading to the BSc degree are reminded that PSYC 320 and PSYC 391-395 do not count as science credits. All other 300- and 400-level Psychology courses count as science credits.

30 Minor in Psychology

- 12 PSYC 310³, 315³, 320⁶
 9 Chosen from PSYC 322³, 323³, 326³, 331³, 343³, 346³, 349³, 352³, 358³, 370³
 9 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program adviser

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

PSYC 200 **Introductory Psychology** (6 credits)

This comprehensive survey course introduces the student to the phenomena and terminology encountered in a number of areas of scientific psychology. Topics covered include basic mechanisms of the receptors and nervous system, memory, motivation, perception, learning, abnormal psychology, personality, cognition, and social aspects of behaviour. Lectures and conferences.

NOTE: Students who have received credit for or exemption from Introductory Psychology at cégep or elsewhere may not take this course for credit.

NOTE: Students entering PSYC programs who have not received credit for or exemption from Introductory Psychology at cégep or elsewhere must take this course, but not for Psychology program credit.

NOTE: Students who have received credit for PSYC 200 or equivalent may not take MANA 213 for credit.

PSYC 280 **Adolescence** (3 credits)

Prerequisite: Introductory Psychology or equivalent. This course deals with various aspects of adolescence including such topics as physical change, sexual and sex-related behaviours, cognitive growth, and lifestyles.

NOTE: Students registered in a Psychology program may not take this course for credit.

NOTE: Students who have received credit for PSYC 379 or 391 may not take this course for credit.

PSYC 281 **Learning Disabilities** (3 credits)

Prerequisite: Introductory Psychology or equivalent. This course deals with selected aspects of theory and practice related to learning disabilities including perceptual and motor disabilities, language disabilities, and methods of diagnosis and remediation.

NOTE: Students registered in a Psychology program may not take this course for credit.

NOTE: Students who have received credit for PSYC 377 or 392 may not take this course for credit.

PSYC 283 **Emotional Development** (3 credits)

Prerequisite: Introductory Psychology or equivalent. This course focuses on emotional development in childhood. Topics that may be considered include prenatal and genetic influences on emotion, attachment formation, effects of alternative child care, role of father, and poverty. The normal development of anxiety, fear, and affection is discussed.

NOTE: This course is intended primarily for students in the Family Life Education Certificate program (Department of Applied Human Sciences).

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 284 **Socialization** (3 credits)

Prerequisite: Introductory Psychology or equivalent. This course examines socialization processes during infancy, childhood, and adolescence. The effects on socialization of factors such as family structure, disciplinary techniques, and social class are considered. The development of social skills, morality, pro-social behaviour, and aggression are examined.

NOTE: This course is intended primarily for students in the Family Life Education Certificate program (Department of Applied Human Sciences.)

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 286 **Psychology of Leisure** (3 credits)

Prerequisite: Introductory Psychology or equivalent. This course explores the rapidly developing psychologically-oriented theory and research on leisure and its meaning and importance for the individual. Topics that may be considered include motivation for leisure activities, planning for leisure and/or retirement, therapeutic value of leisure, new conceptions of work and leisure, leisure and self-development.

NOTE: Students registered in a Psychology program may not take this course for credit.

SELECTED TOPICS IN PSYCHOLOGY

The 200-level Selected Topics courses (PSYC 297; PSYC 298; PSYC 299) are designed as elective courses for students who are not registered in a Psychology program. These courses, which have only Introductory Psychology (usually cégep Psychology 102 or PSYC 200) or equivalent as a prerequisite, cover a wide variety of areas of contemporary interest. The particular topics vary from session to session and the material is dealt with in a manner appropriate for students who have minimal formal background in psychology. Students should consult the Psychology Department Course Guide (published yearly) to find out the topic titles for a particular session. *NOTE: Students registered in a Psychology program may not take these courses for credit.* The Department also offers 300- and 400-level topic courses for students registered in Psychology programs. (See below).

PSYC 297 *Selected Topics in Psychology*
(3 credits)

PSYC 298 *Selected Topics in Psychology*
(3 credits)

PSYC 299 *Selected Topics in Psychology*
(6 credits)

PSYC 310 *Strategies of Inquiry in Psychology* (3 credits)

Prerequisite: PSYC 200 or equivalent; PSYC 315 previously or concurrently. The course describes how information is obtained in modern, scientifically oriented psychology. The variety of means used to understand psychological phenomena and processes is elaborated with reference to particular areas in psychology. Observational, experimental, and correlational techniques are presented in the context of ongoing research. The course emphasizes a conceptual understanding of the procedures that are necessary for developing and evaluating the explanations and theories that we construct to make sense of the diverse phenomena that constitute the domains of modern psychology. Lectures and laboratory.

PSYC 311 *Research Experience in Psychology* (3 credits)

Prerequisite: PSYC 310; PSYC 315; PSYC 316 previously or concurrently, and permission of the Department. The course introduces students to more advanced methodological issues. The course provides experience in the critical evaluation of research design and methodology. Students must design, conduct, analyse, and present a report on a brief research project. The course is primarily intended for students who are preparing for graduate school. Lectures and laboratory.

PSYC 315 *Statistical Analysis I* (3 credits)

Prerequisite: Mathematics A (3 credits) or Quantitative Methods. This course is an

introduction to statistics, presented in an experimental psychology context. Topics dealt with include frequency distributions, measures of central tendency and dispersion, the normal curve, correlation, elementary probability theory, an introduction to hypothesis testing, and the *t* test. *NOTE See §200.7*

NOTE: Students who have completed cégep QM 360-300 (Quantitative Methods) and MATH 201-300 (Complementary Topics in Mathematics) with 75% or better grades can be exempt from PSYC 315. Exemptions may be granted on the basis of other courses. Application for exemption should be made to the Psychology Department.

PSYC 316 *Statistical Analysis II* (3 credits)

Prerequisite: PSYC 310; PSYC 315. This course builds on the experience derived from PSYC 310 and 315 to advance the student's understanding of hypothesis testing and statistical inferences. The material dealt with includes non-parametric statistics, the chi-square and F-distribution, introductory analysis of variance, and various correlational techniques. *NOTE See §200.7*

PSYC 317 *Multivariate Statistical Procedures* (3 credits)

Prerequisite: PSYC 310; PSYC 315; PSYC 316, and permission of the Department. Advanced statistical techniques are presented with an emphasis on procedures that allow the use of multiple independent or dependent variables. Examples of specific techniques to be discussed in the course include partial and multiple regression, the analysis of covariance (ANCOVA), and multivariate analysis of variance (MANOVA). The course includes a computer laboratory in which students practice the computation of various procedures with real data sets. Lectures and laboratory.

PSYC 318 *Measurement of Individual Differences* (3 credits)

Prerequisite: PSYC 310; PSYC 315. A consideration of the general theory of psychological measurement and its application in the development and use of various psychometric instruments such as achievement, intelligence, aptitude, personality, and interest tests. Derived scores, norms, reliability, and validity of these instruments are discussed in the context of general measurement problems in psychology. *NOTE: Students who have received credit for PSYC 384 may not take this course for credit.*

PSYC 320 *Modern Psychology in Historical Perspective*
(6 credits)

Prerequisite: Introductory Psychology or equivalent. The course deals with the historical background of psychology from ancient and medieval times up to the present. Early contributions to psychology from the fields of philosophy, physics, physiology, and

psychophysics are presented and related to the various schools of psychological thought from the late-nineteenth century to the modern era.

PSYC 322 *Fundamentals of Abnormal Psychology* (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The course deals with major concepts and issues of abnormal psychology in humans (stigma, traits vs. states, ethics). It studies the major scientific models of diagnosis, etiology, assessment and therapy. It presents the major disorders of the five axes of the DSM system. Social, learning, cognitive, biomedical and psychodynamic approaches to major clinical disorders are studied with emphasis on research and methodology throughout.

NOTE: Students who have received credit for PSYC 339 may not take this course for credit.

PSYC 323 *Psychopathology: Behaviour Disorders* (3 credits)

Prerequisite: PSYC 322. The course presents a focused and thorough treatment of issues in one category of adult psychopathology. Advanced contemporary research and theory covering a wide range of behaviour disorders is presented. Topics studied include disorders of personality, anxiety, mood, psychosexuality, eating, and life-adjustment. Post-traumatic, psychosomatic, somatoform, and dissociative disorders may also be discussed.

NOTE: Students who have received credit for PSYC 339 may not take this course for credit.

PSYC 324 *Psychopathology: Psychotic and Organic Disorders* (3 credits)

Prerequisite: PSYC 322. The course presents a focused and thorough treatment of issues in organic-related adult psychopathology. The course deals with advanced contemporary research and theory of various clinical disorders such as the psychoses, schizophrenias and schizophreniform disorders, degenerative disorders, aging disorders, dementias, substance-abuse disorders and psychophysiological disorders.

NOTE: Students who have received credit for PSYC 339 may not take this course for credit.

PSYC 325 *Eating Disorders* (3 credits)

Prerequisite: PSYC 310; PSYC 315. A number of eating problems are reviewed including those resulting in obesity, anorexia nervosa, and/or bulimia. Eating problems are examined from a number of perspectives with emphasis given to developmental, physiological, and social learning theories. For example, social learning theory will be related to differential development of eating problems in men and women.

Treatment of eating problems is studied in relation to behavioural, psychodynamic, and physiological interventions.

NOTE: Students who have received credit for PSYC 398B may not take this course for credit.

PSYC 326 *Theories of Personality* (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The organization, functioning, and development of personality are discussed from the point of view of the major current theories. Evidence from experiments and field studies are discussed. Socio-economic, cultural, and biological factors may also be considered.

NOTE: Students who have received credit for PSYC 336 may not take this course for credit.

PSYC 327 *Contemporary Issues in Personality* (3 credits)

Prerequisite: PSYC 326. The course will critically examine the research and theory concerning a number of selected issues of contemporary interest in the area of personality.

NOTE: Students who have received credit for PSYC 336 may not take this course for credit.

PSYC 329 *Behaviour Genetics* (3 credits)

Prerequisite: PSYC 310; PSYC 315. The discipline of behavioural genetics provides a meeting place for the behavioural sciences and genetics. The course provides an introduction to modern ideas concerning the complementary roles of hereditary and environmental influences in the shaping of behaviour. Basic concepts including the foundations of population genetics, transmission genetics and heritability are reviewed. Modern techniques, such as adoption studies and twin studies, are considered. The influence of genetics in areas such as cognition, personality, and psychopathology is explored.

PSYC 331 *Social Psychology* (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The behaviour of the individual as a member of a larger grouping or society is dealt with. The study of the social influences on individuals or groups involves consideration of topics such as attitude change and development, intra-group communication and problem-solving, leadership, prejudice, development of social movements and cults.

NOTE: Students who have received credit for PSYC 333 may not take this course for credit.

PSYC 332 *The Self in Social Context* (3 credits)

Prerequisite: PSYC 331. The course addresses the wide range of theoretical and empirical approaches to the self in contemporary social psychology. Self-esteem and self-concept are addressed in terms of personal and social norms, affective experience, and interpersonal behaviour.

NOTE: Students who have received credit for PSYC 333 may not take this course for credit.

PSYC 334 *Emotion in the Social Context* (3 credits)

Prerequisite: PSYC 331. This course addresses models of emotion, individual differences in emotion and mood, and how emotion influences

attention, memory, evaluation, and behaviour in the social domain.

NOTE: Students who have received credit for PSYC 333 may not take this course for credit.

PSYC 335 Ethnic Relations (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The course is a survey of various processes underlying intergroup relations (especially ethnic and race). It examines psychological defences, intercultural (in)compatibility, personality factors, and how humans feel about members of their own group vs. members of other human groups, and other species. Cognitive processes that lead to distorted impressions of outgroups are contrasted with those promoting the relatively accurate stereotypes necessary for effective intercultural training. In all of the above, the utility of evolutionary biology as a general frame of reference is considered.

NOTE: Students who have received credit for PSYC 398I may not take this course for credit.

PSYC 343 Motivation I (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. This course reviews and evaluates theories and empirical findings concerning motivation. Topics include the study of motivation in historical perspective, the biological and evolutionary bases of motivation, drive, arousal, and incentive theories of motivation.

NOTE: Students who have received credit for PSYC 342 may not take this course for credit.

PSYC 344 Motivation II (3 credits)

Prerequisite: PSYC 343. This course is a continuation of PSYC 343; it presents a more focused and thorough treatment of selected topics in motivation. These may include sleep, hunger, sex, aggression, altruism, achievement, pain, fear, and play. Different sections of the course may cover different sets of topics.

NOTE: Students who have received credit for PSYC 342 may not take this course for credit.

PSYC 346 Learning I (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. This course reviews and evaluates theories and empirical findings concerning basic mechanisms of learning. Topics include the study of learning in historical perspective, Pavlovian conditioning, operant conditioning, reinforcement, stimulus control of behaviour, and the aversive control of behaviour.

NOTE: Students who have received credit for PSYC 345 may not take this course for credit.

PSYC 347 Learning II (3 credits)

Prerequisite: PSYC 346. This course is a continuation of PSYC 346; it presents a more focused and thorough treatment of more advanced topics in learning. These may include developmental aspects of learning, animal memory and cognition, human applications of conditioning principles, biological constraints on

learning, or the physiology of learning and memory. Different sections of the course may cover different sets of topics.

NOTE: Students who have received credit for PSYC 345 may not take this course for credit.

PSYC 349 Sensation and Perception I (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. Physiological and psychological bases of sensation and perception. Topics such as pitch perception, colour vision, perception of movement, size, and distance are included. The areas of sensation and perception are integrated through a human information-processing approach to the understanding of audition, vision, and other modalities.

NOTE: Students who have received credit for PSYC 348 may not take this course for credit.

PSYC 350 Sensation and Perception II (3 credits)

Prerequisite: PSYC 349. A continuation of PSYC 349. This course examines current topics in the area of sensation and perception with an emphasis on recent research and developments in vision and audition, including areas such as colour vision, space perception, the anatomical and physiological bases of perception, the perception of illusions, and motion perception. Different sections of this course may cover different sets of topics.

NOTE: Students who have received credit for PSYC 348 may not take this course for credit.

PSYC 352 Cognition I (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. A course that introduces the general area of cognitive psychology through the presentation and discussion of the theoretical and experimental foundations for our current understanding of how humans acquire and use knowledge. Current research findings and theories in the areas of pattern recognition, attention, memory, and imagery are surveyed. Following this introductory course, students should have the necessary background to pursue advanced topics in cognition.

NOTE: Students who have received credit for PSYC 351 may not take this course for credit.

PSYC 353 Cognition II (3 credits)

Prerequisite: PSYC 352. A continuation of PSYC 352 that presents thorough treatments of topics such as cognitive development, psycholinguistics, concept acquisition, reading, speech perception, problem-solving, and reasoning. Different sections of this course may cover different sets of topics.

NOTE: Students who have received credit for PSYC 351 may not take this course for credit.

PSYC 358 Fundamentals of Behavioural Neurobiology (3 credits)

Prerequisite: BIOL 200 or BIOL 201 or cégep

Biology 301 or cégep Biology 921. The purpose of this course is to introduce students to the neural substrate of behaviour. Topics include the structure and function of neurons as well as neural communication, an introduction to neuro-anatomy and endocrinology, the processing of sensory information, and the control of movement.

NOTE: Students who have received credit for BIOL 383, PSYC 357, 360 or 363 may not take this course for credit.

PSYC 359 Neuropsychology
(3 credits)

Prerequisite: PSYC 358. The purpose of this course is to introduce students to basic neurology, including the neurological examination, clinical tests, and neurological disorders. The general principles underlying human neuropsychology are discussed, as well as the development of neural functioning and recovery following brain damage.

NOTE: Students who have received credit for PSYC 363 may not take this course for credit.

NOTE: Students who have received credit for PSYC 357 or 360 may take this course for credit.

PSYC 361 Neurobiology of Drug Dependence (3 credits)

Prerequisite: PSYC 310; PSYC 315; or six credits from among PSYC 358, 359, 362, 365, 367. This course focuses on the behavioural and pharmacological mechanisms underlying the phenomenon of drug dependence. Concepts such as physical and psychological dependence, tolerance, reinforcement, and aversion are discussed. In addition the role of these concepts in the development of new treatment procedures is assessed.

PSYC 362 Neurobiology of Learning and Memory (3 credits)

Prerequisite: PSYC 346; PSYC 358; or permission of the Department. A number of mechanisms subserving learning and memory are investigated, including models based on relatively simple nervous systems, e.g., conditioning in Aplysia, as well as more complex systems, e.g., the neuronal mechanisms mediating eyeblink conditioning in the rabbit and the neuronal pathways that mediate reinforcement. Other topics may include the anatomical bases of memory, including the role of the hippocampus in spatial memory and the role of the NMDA receptor in learning and memory.

NOTE: Students who have received credit for PSYC 357 or 360 may not take this course for credit.

NOTE: Students who have received credit for PSYC 363 may take this course for credit.

PSYC 365 Neurobiology of Sensation and Perception (3 credits)

Prerequisite: PSYC 349; PSYC 358; or permission of the Department. The course examines the relation between the structure of

sensory systems and perceptual function. Some of the topics addressed are how the structure of the eye and ear determines how and what we see and hear; the modularity of cortical organization; segregation and integration of visual information; PDP and other models; bottom-up and top-down processing; the reconstruction of the perceptual world.

NOTE: Students who have received credit for PSYC 357 or 360 may not take this course for credit.

NOTE: Students who have received credit for PSYC 363 may take this course for credit.

PSYC 367 Neurobiology of Motivated Behaviours (3 credits)

Prerequisite: PSYC 343; PSYC 358; or permission of the Department. The course examines the neural mechanisms mediating motivated behaviour. Topics addressed include the following: pleasure and pain; ingestive behaviour; sexual and reproductive behaviour; aggression; temperature regulation; sleep, arousal, and biological rhythms.

NOTE: Students who have received credit for PSYC 357 or 360 may not take this course for credit.

NOTE: Students who have received credit for PSYC 363 may take this course for credit.

PSYC 368 Neurobiology of Sexual Differentiation (3 credits)

Prerequisite: PSYC 358. This course deals with the genetic and hormonal influences that lead to the sexual differentiation of the brain and behaviour. Mechanisms of chromosomal and neuroendocrine effects on the body and neural circuits, and plasticity are discussed. Animal differentiation as well as normal and abnormal human differentiation are examined.

NOTE: Students who have received credit for PSYC 390 may not take this course for credit.

PSYC 369 Hormones and Behaviour
(3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently; PSYC 358. The course deals with the role of hormones in integrating the activity of various neural, endocrine, and sensory systems to bring about organized, purposeful behaviour. Topics discussed include the reproductive, sexual, or environmentally adaptive systems, with treatment of material ranging from the molecular to the behavioural level.

PSYC 370 Fundamentals of Developmental Psychology (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The course is presented and organized from the perspective of developmental psychology as a science. Various aspects of psychological development are considered including physical growth, cognitive development, language acquisition and social and emotional development, with a

particular focus on development during early and middle childhood. There is an emphasis on research strategy and methodology throughout. Specific lecture topics have been chosen to be representative of landmark research, significant new research trends, contemporary issues, and predominant theories.

NOTE: Students who have received credit for PSYC 330 may not take this course for credit.

PSYC 373 *Infancy* (3 credits)

Prerequisite: PSYC 370. The course provides a comprehensive account of psychological development in infancy. Aspects of infant development such as physical, perceptual, cognitive, verbal, emotional, and social development are covered. Theoretical perspectives and research methods specific to the study of infant development are emphasized.

NOTE: Students who have received credit for PSYC 330 may not take this course for credit.

PSYC 377 *Abnormal Development During Childhood* (3 credits)

Prerequisite: PSYC 322; PSYC 370. Using principles of developmental and clinical psychology, this survey course focuses primarily on understanding the pathways to abnormal adjustment in childhood. The course covers the roots of social competence/deviance in the early experience and temperament of the child; the assessment of social and cognitive deficits and the efficacy of interventions. Applications to populations of children with special problems are examined. Examples of the special problems include hyperactivity, conduct disorders, overanxiety, learning disabilities, mental retardation, and autism.

PSYC 379 *Adolescent Development* (3 credits)

Prerequisite: PSYC 370. The course deals with various aspects of development in adolescence. Such topics as hormonal and physical changes, cognitive development (Piagetian, information-processing and psychometric views), the peer group, friendships, parent-adolescent interactions, sex roles and identity formation, sexuality, delinquency, drug abuse, suicide, and psychological disorders in adolescents may be discussed. Whenever possible, developmental issues in adolescence are considered from a cross-cultural as well as historical perspective.

PSYC 380 *Aging* (3 credits)

Prerequisite: PSYC 370. This course covers recent developments in the psychology of aging with emphasis on research aspects. The topics examined include methodological considerations, the implications of physiological changes due to age on people's behaviour, and the influence of aging on personality, cognitive processes, coping styles, sex roles, and adjustment. The class will be asked to consider the extent to which psychological changes associated with age are caused by biological processes and by social processes.

PSYC 381 *Scaling* (3 credits)

Prerequisite: PSYC 310; PSYC 315. The theoretical basis and application of scaling methods in psychophysics and social psychology are studied. Quantitative scales for the measurement of attitudes and sensations are derived and constructed. Other topics that may be covered include subjective estimate methods, the law of comparative judgement, unfolding techniques, and signal-detection theory.

PSYC 385 *Personnel Psychology* (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. This course focuses on the contributions of psychology to several human resource considerations in organizations. Topics include personnel selection, training methods, personnel appraisal, and career development. Other relevant topics may be discussed depending on student interest. This is an applied area of psychology and therefore the interplay between theory, research, and application is stressed.

NOTE: Students who have received credit for PSYC 375 may not take this course for credit.

PSYC 386 *Organizational Psychology* (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. The theoretical and research interests of industrial psychologists centre on such topics as employee motivation and job satisfaction, leadership and communication in organizations, and organizational development. Other related topics may be covered. This is an applied area of psychology and therefore the interplay between theory, research, and application is stressed.

NOTE: Students who have received credit for PSYC 375 may not take this course for credit.

PSYC 391 *Gender in the Social Context* (3 credits)

Prerequisite: PSYC 331. The course deals with the issue of how the biological categories of female and male are modified in the social context. It examines the social transformation of biological females and males into gendered individuals from a theoretical and empirical perspective. The development of gender identity, gender role, and the sex vs. gender differences in various areas of psychological functioning such as cognitive behaviour, mental health, and social behaviours are analysed, and their underlying mechanisms examined.

NOTE: Students who have received credit for PSYC 390 may not take this course for credit.

PSYC 392 *Health Psychology* (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently. Psychological issues in the promotion of health and the treatment of illness are explored. Theoretical as well as empirical contributions to the study of health promotion and disease etiology are scrutinized.

Biomedical and psychosocial etiological models of health and disease are examined from epidemiological and psychological perspectives. *NOTE: Students who have received credit for PSYC 364 may not take this course for credit.*

PSYC 393 *Contemporary Issues in Health Psychology* (3 credits)

Prerequisite: PSYC 392. This course offers a more focused treatment of selected advanced topics in health psychology. Topics covered may include the following: the relationship between behavioural reactivity and cardiovascular health, illness behaviour, psychological aspects of pain, the role of aerobic exercise in health promotion, psychosocial aspects of substance abuse, and relapse prevention strategies for harm reduction. *NOTE: Students who have received credit for PSYC 364 may not take this course for credit.*

PSYC 395 *Psychology of Language and Communication* (3 credits)

Prerequisite: PSYC 310; PSYC 315; or a minimum of three credits from among COMS 240; FRAN 481; LING 200; or permission of the Department. The course deals with the cognitive, developmental, and social aspects of language and human communication. Topics discussed may include psychological consideration of modern linguistic theories, child-language development, second-language development in children and adults, speech perception, biological basis of language, social psychological aspects of human communication. *NOTE: Students who have received credit for PSYC 393 may not take this course for credit.*

PSYC 396 *Foundations of Animal Behaviour* (3 credits)

Prerequisite: PSYC 310 and PSYC 315 previously or concurrently; or nine credits in cégep-level Chemistry and Biology courses; or permission of the Department. This course explores the bases underlying the study of animal behaviour as they relate to the study of psychobiology and evolutionary psychology. Topics include methodological considerations, behaviour genetics, theory of evolution, basic sociobiological and ethological concepts. *NOTE: Students who have received credit for PSYC 366 may not take this course for credit.*

PSYC 397 *Contemporary Issues in Animal Behaviour* (3 credits)

Prerequisite: PSYC 396. This is a continuation of PSYC 396. The course presents a detailed treatment of topics such as biological reproductive strategies, animal communication, territoriality and aggression, the effects of early experience, comparative animal learning and cognition, and mechanism of orientation navigation and homing. *NOTE: Students who have received credit for PSYC 366 may not take this course for credit.*

SELECTED PROBLEMS IN PSYCHOLOGY

The Selected Problems in Psychology courses (PSYC 398 and PSYC 399) are designed for students enrolled in a Psychology program. The material is dealt with in a manner that assumes a background in experimental psychology and, in some cases, specific preparation through prior completion of a related course. The minimal prerequisite is PSYC 310 (Strategies of Inquiry in Psychology) and PSYC 315 (Statistical Analysis I). Students should consult the Psychology Department Course Guide (published yearly) for details concerning available courses.

PSYC 398 *Selected Problems in Psychology* (3 credits)

PSYC 399 *Selected Problems in Psychology* (6 credits)

PSYC 400 *Advanced Experimental Psychology* (6 credits)

Prerequisite: PSYC 310; PSYC 311; PSYC 315; PSYC 316 or equivalent, and permission of the Department. The course provides experience in the design, conduct, analysis, and reporting of independent research in the major areas of psychology. The research is undertaken under the supervision of a faculty member.

PSYC 421 *Honours Seminar: Selected Topics in Psychology* (3 credits)

Prerequisite: PSYC 311, 316, and permission of the Department. This seminar critically examines current topics in psychology such as learning, perception, cognition, and language. Emphasis is on current theory as it relates to selected topics from these areas. *NOTE: Students who have received credit for PSYC 420 may not take this course for credit.*

PSYC 422 *Honours Seminar: Selected Issues in Psychology* (3 credits)

Prerequisite: PSYC 311, 316, and permission of the Department. This seminar critically examines current issues in psychology such as social and developmental processes, motivation, emotion, and the biological bases of behaviour. Selected issues from these areas are discussed from theoretical perspectives specific to given phenomena. *NOTE: Students who have received credit for PSYC 420 may not take this course for credit.*

PSYC 430 *Honours Thesis* (6 credits)

Prerequisite: Permission of the Department. Open to final-year Honours students. This course requires the student to propose and conduct a study and submit a thesis written according to the APA format. The work is supervised by a thesis chair selected by the student from within the Department.

PSYC 436 *Directed Readings in Psychology* (3 credits)

Prerequisite: PSYC 311, PSYC 316, and permission of the Department. This course is designed for the advanced student wishing to do independent, individually supervised literature research on a specific topic in psychology. This research culminates in a written paper. Students should have a well-defined topic in mind before registering for this course.

NOTE: Students who have received credit for PSYC 438 may not take this course for credit.

PSYC 439 *Directed Research in Psychology* (6 credits)

Prerequisite: PSYC 311, PSYC 316, and permission of the Department. Under the supervision of a faculty member, the student carries out an independent research project and reports it in writing. The area of study must be decided upon through consultation with the faculty member.

NOTE: Students who have received credit for PSYC 437 may not take this course for credit.

SPECIAL ADVANCED SEMINARS

Permission of the Department is required for registration in the Special Advanced Seminars (PSYC 498 and PSYC 499). These courses are normally open to Specialization and Honours students who are completing their final 30 credits. The usual minimal prerequisite for these specialized courses is PSYC 310, PSYC 311 (Strategies of Inquiry in Psychology, Research Experience in Psychology) and PSYC 315, PSYC 316 (Statistical Analysis I & II). Because the various topics offered are dealt with in depth at an advanced level, specific preparation through prior completion of a related course may also be required.

PSYC 498 *Special Advanced Seminar*
(3 credits)

PSYC 499 *Special Advanced Seminar*
(6 credits)

31.270 RELIGION

Faculty	<i>Chair</i> LESLIE ORR, Associate Professor	<i>Assistant Professor</i> LYNDA CLARKE		
	<i>Professors</i> FREDERICK BIRD MICHEL DESPLAND JACK LIGHTSTONE IRA ROBINSON	<i>Québec and Canadian Jewish Studies Chair</i> NORMAN RAVVIN		
	<i>Hindu Studies Chair</i> T.S. RUKMANI, Professor	<i>Adjunct Professors</i> HOWARD JOSEPH MARC LALONDE SHEILA McDONOUGH SUSAN PALMER JOHN L. ROSSNER		
	<i>Associate Professors</i> NORMA JOSEPH MICHAEL OPPENHEIM			
Location	Sir George Williams Campus Annex FA, Room: 101 (514) 848-2065			
Department Objectives	The Department of Religion is dedicated to the academic study of various faiths and of social and cultural phenomena affected by religions. The curriculum includes the comparative study of many religious traditions of the world. At both the undergraduate and graduate levels, students are encouraged to develop an understanding of at least two religious traditions. Whatever the student's special focus, the informed appreciation of the beliefs and values of other cultures is considered an essential dimension of education for today's world.			
Programs	<i>Students are responsible for satisfying their particular degree requirements.</i> <i>The superscript indicates credit value.</i> <table><tr><td>60 BA Honours in Religion 12 In a language related to thesis; or in a related discipline such as Anthropology, English Literature, History, Philosophy, Sociology, Theological Studies, Women's Studies 6 RELI 211⁶ or 213⁶ 21 From area of primary concentration* 6 From area of secondary concentration* 6 RELI elective credits at the 300 or 400 level 3 RELI 409³ 6 RELI 410⁶ *See areas of concentration. 42 BA Major in Religion 6 RELI 211⁶ or 213⁶ 21 From area of primary concentration* 6 From area of secondary concentration* 6 RELI elective credits at the 300 or 400 level 3 RELI 409³ *See areas of concentration.</td><td>30 Minor in Religion 6 RELI 211⁶ or 213⁶ 24 RELI elective credits (chosen in consultation with the departmental adviser) 48 BA Major in Judaic Studies 12 Chosen from Hebrew Language: HEBR 210⁶, 250⁶; RELI 401³, 402³ 6 RELI 211⁶ or 213⁶ 3 RELI 220³ 9 Chosen from RELI 301³, 326³, 327³, 328³ 9 Chosen from RELI 329³, 334³, 335³, 337³, 381³, 391³, 392³, 394³, 395³, 397³ 6 Chosen from RELI 223³, 224³, 302³, 303³, 304³, 305³, 306³, 319³, 340³, 341³, 342³ 3 RELI 409³</td></tr></table> 120 Bi-University Major in Judaic Studies By agreement between the University and Bar-Ilan University, Ramat-Gan, Israel, students may be admitted to a 120-credit bi-university program designed to provide the academic base for prospective teachers in Jewish Studies programs at the Primary, Elementary, and Junior High School levels in		60 BA Honours in Religion 12 In a language related to thesis; or in a related discipline such as Anthropology, English Literature, History, Philosophy, Sociology, Theological Studies, Women's Studies 6 RELI 211 ⁶ or 213 ⁶ 21 From area of primary concentration* 6 From area of secondary concentration* 6 RELI elective credits at the 300 or 400 level 3 RELI 409 ³ 6 RELI 410 ⁶ *See areas of concentration. 42 BA Major in Religion 6 RELI 211 ⁶ or 213 ⁶ 21 From area of primary concentration* 6 From area of secondary concentration* 6 RELI elective credits at the 300 or 400 level 3 RELI 409 ³ *See areas of concentration.	30 Minor in Religion 6 RELI 211 ⁶ or 213 ⁶ 24 RELI elective credits (chosen in consultation with the departmental adviser) 48 BA Major in Judaic Studies 12 Chosen from Hebrew Language: HEBR 210 ⁶ , 250 ⁶ ; RELI 401 ³ , 402 ³ 6 RELI 211 ⁶ or 213 ⁶ 3 RELI 220 ³ 9 Chosen from RELI 301 ³ , 326 ³ , 327 ³ , 328 ³ 9 Chosen from RELI 329 ³ , 334 ³ , 335 ³ , 337 ³ , 381 ³ , 391 ³ , 392 ³ , 394 ³ , 395 ³ , 397 ³ 6 Chosen from RELI 223 ³ , 224 ³ , 302 ³ , 303 ³ , 304 ³ , 305 ³ , 306 ³ , 319 ³ , 340 ³ , 341 ³ , 342 ³ 3 RELI 409 ³
60 BA Honours in Religion 12 In a language related to thesis; or in a related discipline such as Anthropology, English Literature, History, Philosophy, Sociology, Theological Studies, Women's Studies 6 RELI 211 ⁶ or 213 ⁶ 21 From area of primary concentration* 6 From area of secondary concentration* 6 RELI elective credits at the 300 or 400 level 3 RELI 409 ³ 6 RELI 410 ⁶ *See areas of concentration. 42 BA Major in Religion 6 RELI 211 ⁶ or 213 ⁶ 21 From area of primary concentration* 6 From area of secondary concentration* 6 RELI elective credits at the 300 or 400 level 3 RELI 409 ³ *See areas of concentration.	30 Minor in Religion 6 RELI 211 ⁶ or 213 ⁶ 24 RELI elective credits (chosen in consultation with the departmental adviser) 48 BA Major in Judaic Studies 12 Chosen from Hebrew Language: HEBR 210 ⁶ , 250 ⁶ ; RELI 401 ³ , 402 ³ 6 RELI 211 ⁶ or 213 ⁶ 3 RELI 220 ³ 9 Chosen from RELI 301 ³ , 326 ³ , 327 ³ , 328 ³ 9 Chosen from RELI 329 ³ , 334 ³ , 335 ³ , 337 ³ , 381 ³ , 391 ³ , 392 ³ , 394 ³ , 395 ³ , 397 ³ 6 Chosen from RELI 223 ³ , 224 ³ , 302 ³ , 303 ³ , 304 ³ , 305 ³ , 306 ³ , 319 ³ , 340 ³ , 341 ³ , 342 ³ 3 RELI 409 ³			

Canada. Admission to the program depends upon acceptance by both universities. Successful applicants may spend up to the first 24 months (i.e., two Regular and two Summer sessions) at Bar-Ilan. The rest of the requirements for the degree must be completed at Concordia while the student is registered in the BA Major in Judaic Studies. Further information on the program may be obtained from the Department of Religion. Students interested in the Southern Asia Studies programs should refer to the description provided in §31.170 (Interdisciplinary Studies) of this Calendar.

<i>Areas of Concentration</i>	A. Asian Religions (21 credits)	D. Women and Religion (21 credits)
	21 Chosen from RELI 224 ³ , 225 ³ , 226 ³ , 316 ³ , 317 ³ , 319 ³ , 340 ³ , 341 ³ , 342 ³ , 344 ³ , 345 ³ , 346 ³ , 347 ³ , 348 ³ , 349 ³ , 350 ³ , 364 ³ , 383 ³ , 384 ³ , 385 ³	3 RELI 233 ³
	B. Christianity (21 credits)	6 Chosen from RELI 381 ³ , 382 ³ , 383 ³ , 384 ³ , 385 ³ , 386 ³ , 391 ³ , 392 ³
	3 RELI 223 ³	9 Chosen from RELI 372 ³ , 380 ³ , 387 ³ , 388 ³ , 389 ³ , 405 ³ , 406 ³
	9 Chosen from RELI 301 ³ , 302 ³ , 303 ³ , 304 ³	3 Women and Religion elective credits at the 300 or 400 level
	9 Christian Studies elective credits at the 300 or 400 level	
	C. Judaism (21 credits)	
	6 RELI 220 ³ , 301 ³	
	6 Chosen from RELI 326 ³ , 327 ³ , 328 ³	
	9 Judaic Studies elective credits at the 300 or 400 level	

Courses Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

RELI 211 *Understanding Religion*
(6 credits)

A systematic and topical introduction to the study of religion. The purpose of the course is to enable the student to articulate and investigate questions about the meaning and nature of religion. Problems discussed include the elements of religious experience, forms of religious expression and interpretation, religious communities and practices, and the questions raised by the contemporary interfaith dialogue. Materials are taken from a variety of religious traditions.

RELI 213 *Religious Traditions of the World* (6 credits)

A historical and comparative overview of the major religious traditions of the world: Judaism, Christianity, Islam, Hinduism, Buddhism, and Chinese religions, this course examines the religious activities and experiences of both women and men with these religions.

RELI 220 *Introduction to the History and Religion of the Jews* (3 credits)

This course is designed to give an introduction to the history of the Jewish people from ancient times to the present. It also provides an introduction to the social scientific study of contemporary Jewish practice and belief, including a survey of the rituals, practices, and ceremonies of contemporary Jews. It examines the continuities and changes in Jewish society, institutions, concepts, and traditions through the ages.

NOTE: Students who have received credit for RELI 222 may not take this course for credit.

RELI 223 *Introduction to Christianity*
(3 credits)

A basic introduction to Christianity as one of the major religious traditions of the world, this course provides an overall examination of the enduring structures of Christian belief, its central symbols and rituals; it also indicates how they are articulated in both the Eastern and Western traditions.

RELI 224 *Introduction to Islam* (3 credits)

This course introduces students to the life of the prophet Muhammad, and to the teachings of the Qur'an. The historical context of the origins of Islam in Mecca and Medina is studied up to the end of the period of the first four Caliphs. The main emphasis is on a thematic analysis of the contents of the Qur'an.

NOTE: Students who have received credit for RELI 313 may not take this course for credit.

RELI 225 *Introduction to Hinduism*
(3 credits)

This course introduces students to the history and evolution of Hinduism from its early beginnings to the present. It also provides a socio-historic-cultural understanding of many of the practices and beliefs of present-day Hindus by relating them to the development and growth of rituals and ideas such as temples, festivals, pilgrimage and other institutions as well as concepts like Dharma, Karma and Moksha that have kept alive the Hindu faith and in turn have undergone many changes throughout the ages.

NOTE: Students who have received credit for this topic under a RELI 298 number may not take this course for credit.

RELI 226 *Introduction to Buddhism*
(3 credits)

This course introduces students to Buddhism, beginning with the life and teachings of Gautama the Buddha, and providing an historical view of Theravada, Mahayana and Vajrayana traditions of Buddhism in India, Southeast Asia and East Asia. Emphasis is laid upon major systems of thought and characteristic institutions (such as monastic orders [Sangha], temples, shrines, pilgrimage sites).

NOTE: Students who have received credit for RELI 350 or 364 may not take this course for credit.

RELI 233 *Introduction to Women and Religion* (3 credits)

This introduction to the particular problems and issues in the study of women and religion uses case studies from various non-Western traditions. The course presents a survey of the different levels of participation, the complex ritual activities, and the intriguing divine imagery associated with women that are found in many religious traditions. Questions pertaining to the contemporary feminist discourse on such topics as witchcraft, patriarchy, and goddess religions are also explored.

RELI 298 *Selected Topics in Religion*
(3 credits)

RELI 299 *Selected Topics in Religion*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

RELI 301 *Biblical Studies I: The Hebrew Bible* (3 credits)

An introduction to the methods and results of biblical scholarship with regard to the history, culture, and religion of ancient Israel. Particular attention is given to the major religious affirmations and theological concepts of the Hebrew Bible that have become central in the subsequent development of Judaism.

RELI 302 *Biblical Studies II: Christian Origins* (3 credits)

A critical survey of Christian origins, this course focuses on New Testament literature and considers historical setting, history of text, religious and cultural significance. Attention is paid to extra-canonical literature and other relevant sources.

RELI 303 *History of Christian Thought I*
(3 credits)

This critical introduction to Christian thought from the Fathers to 1500 studies both orthodox and heterodox texts placed in full historical context. Students acquire a basic knowledge of Augustine and Aquinas. Authors studied at length may vary from year to year.

RELI 304 *History of Christian Thought II*
(3 credits)

This critical introduction to Christian thought from 1500 to the present studies both orthodox and heterodox texts placed in full historical context. Students acquire a basic knowledge of Protestant and Catholic reformers. Authors studied at length may vary from year to year.

RELI 305 *Christian Social History I*
(3 credits)

This introduction to the social history of Christians from the Church Fathers to 1500 focuses on popular religious belief and practice, the rise of the cult of saints, and the role of images in a pre-literate society.

RELI 306 *Christian Social History II*
(3 credits)

This introduction to the social history of Christianity from 1500 to the present focuses on the interrelationship of ecclesiastical authority, social change, and popular religious practice during the Reformations, the settlements of the New World, the Enlightenment, and the modern era. The course also explores the challenges posed by the encounter between East and West, science, secularization, and post-modernism.

RELI 307 *Christian Mystics* (3 credits)

Prerequisite: Second-year standing. Based on the study of key texts, this course offers a historical examination of a range of mystical and ecstatic experiences within the Christian tradition.

RELI 308 *Heresy and Dissidence in Christianity* (3 credits)

Prerequisite: Second-year standing and three credits in Christianity. This course studies heretical movements and other forms of dissidence, including syncretistic movements.

RELI 309 *Development of Christian Ethics* (3 credits)

Prerequisite: Second-year standing. The development of Christian ethics is examined against the background of other forms of moral discourse. Topics studied at length include natural law, philosophical ethics, and the ethos of secular societies.

RELI 310 *Contemporary Ethical Issues: Personal* (3 credits)

This course identifies and analyses ethical issues arising at the personal level today. Issues are discussed in the context of the interrelationship between moral values and religious convictions. Examples of areas that raise ethical and religious questions for personal existence are: affluence, alienation, work, leisure, aging, drugs.

NOTE: Students who have received credit for RELI 331 may not take this course for credit.

RELI 312 *Contemporary Ethical Issues: Societal* (3 credits)

This course identifies and analyses ethical issues arising from social groups today. In discussing the issues, account is taken of the

bearing of religious institutions and traditions upon social attitudes and problems. Examples of problem areas that evoke ethical and religious debate are: economic and social inequality, race relations, violence and war, hunger and poverty, population growth.

NOTE: Students who have received credit for RELI 332 may not take this course for credit.

RELI 316 *The Golden Age of Islam: From the Abbasids to the Gunpowder Empires* (3 credits)

The course considers patterns of life and thought in the period of Islam widely known as the "Golden Age" — from the achievements of Abbasid civilization centred in Baghdad to the final glories of the Ottoman, Safavid, and Moghul empires in the eighteenth century before the twilight of Islamic political power. The Islamic kingdoms in Spain and Sicily and the expansion of Islam eastward along silk and spice trade routes are also considered. Islamic legal, mystical, theological, and philosophical thought will be studied, as well as the ideas of key religious figures from different regions.

RELI 317 *Islamic Mysticism* (3 credits)

This course focuses on the major themes of Islamic mystical thought as expressed in philosophical writings and in poetry.

NOTE: Students who have received credit for RELI 374 may not take this course for credit.

RELI 319 *Modern Islam* (3 credits)

A study of Islamic religious and social thought in the nineteenth and twentieth centuries. Islamic liberalism, traditionalism, and fundamentalism are compared and contrasted.

RELI 326 *Ancient Judaism* (3 credits)

The concepts, institutions, and literature of early rabbinic Judaism are viewed against its pre-rabbinic and biblical backgrounds as well as in the context of contemporary non-rabbinic forms of Judaism and of the world of late antiquity. The course also examines the development of rabbinic systems of thought and law as preserved primarily in the Mishnah, early Midrash, and the Palestinian and Babylonian Talmuds. Consideration is given as well to popular rabbinic beliefs and practices and to early rabbinic mysticism.

RELI 327 *Medieval Jewish Thought and Institutions* (3 credits)

This course examines the intellectual, religious, and social history of selected Jewish communities during the Middle Ages. Both internal Jewish developments and changing Jewish relations with their non-Jewish neighbours are considered.

RELI 328 *Modern Judaism* (3 credits)

This course surveys the major historical events, sociological and political forces, and intellectual currents which shaped Judaism in the modern period as well as the ways that Jewish communities responded to these forces. Among the topics explored are Emancipation, forms of religious adjustment, anti-semitism, the expe-

rience of Jewish communities in Russia and North America, the Holocaust, and Zionism and the state of Israel.

RELI 329 *Israel: Religion and State* (3 credits)

This course studies the emergence and development of the state of Israel, from the beginnings of the Zionist movement to the present time. It also explores the major political, social, and intellectual developments in both the pre- and post-state periods. The role of Judaism within the changing state is a primary focus.

RELI 334 *The Canadian Jewish Experience* (3 credits)

This course examines the Canadian Jewish community from its eighteenth-century origins to the present from the perspectives of modern Jewish and Canadian history.

RELI 335 *Selected Topics in Canadian Jewish Studies* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

RELI 336 *Sephardic Judaism* (3 credits)

This course studies the social and spiritual life of the various communities within the Sephardi world. Topics include Judaism under Islam; the expulsion and dispersion; Sephardi-Maghrebi Judaism; modern times in Arab lands; Sephardi life in the new world, Europe, and Israel. In addition, the philosophical, Halakhic, biblical, and mystical works of Sephardi Jews are examined.

NOTE: Students who have received credit for RELI 352 may not take this course for credit.

RELI 337 *The Social Scientific Study of Jewish Communities* (3 credits)

Prerequisite: Second-year standing or permission of the Department. By means of the analysis of particular issues, texts, or communities, this course utilizes the methods of the social sciences to analyse Jews and their societies. Issues may include the social scientific analysis of ancient or medieval texts and their social contexts, modern Jewish identity, acculturation in contemporary Israeli society, North American Jewish communities, and Diaspora communities.

RELI 338 *Holocaust: Historical Circumstances* (3 credits)

This course examines the historical circumstances that made possible the systematic destruction of European Jewry in the years 1939-45, as well as the process of destruction and the Jewish and world responses to that destruction.

NOTE: Students who have received credit for RELI 357 may not take this course for credit.

RELI 339 *The Impact of the Holocaust on Religious Thought* (3 credits)

This course examines the ramifications of the Holocaust in Jewish and Christian thought.

Issues discussed include the problem of evil; suffering; the election of Israel; God's relation to the course of human events.

NOTE: Students who have received credit for RELI 358 may not take this course for credit.

RELI 340 *Hindu Thought and Institutions in the Ancient Period* (3 credits)

This introduction to the religious concepts, practices, and institutions of ancient India, is based on the literature of the Vedas, including the Upanisads. The course examines the contribution of various aspects of the Brahmanical tradition to the development of Hinduism, and explores the interaction between religions in the ancient period.

NOTE: Students who have received credit for RELI 320 may not take this course for credit.

RELI 341 *Hindu Thought and Institutions of the Classical Period* (3 credits)

This survey of the development of Hinduism in the period 500 B.C.E. to 500 C.E. is based on texts drawn from epic literature and the Sastras. This course also examines the emergence in the classical period of fundamental patterns of Hindu religious practice, social organization, and philosophical enquiry.

RELI 342 *Hindu Thought and Institutions of the Medieval Period* (3 credits)

This survey of the developments within Hinduism in the medieval period makes special reference to the emergence of sectarian devotional movements (Vaisnava, Saiva, and Sakta traditions) and to the elaboration of religious institutions and philosophical schools.

NOTE: Students who have received credit for RELI 321 may not take this course for credit.

RELI 344 *Hindu Mysticism* (3 credits)

This examination of the various experience and practices of Hindu mystics includes a consideration of Yoga and of other philosophical, theological, and devotional mystical traditions.

RELI 345 *Major Developments in Modern Hinduism* (3 credits)

This course focuses on some of the major personalities and movements that have shaped the character of modern Hinduism. The course examines the ideas and activities of reformers, philosophers, and religious and political leaders, beginning in the nineteenth century, and continuing into the twentieth century, with figures such as Gandhi, and into the present day. The course explores the relevance of the thought and methods of these thinkers and activists to contemporary society in India and in the West.

RELI 346 *The Hindu Diaspora* (3 credits)

This historical examination of the experience of Hindus outside India makes special reference to the situation and activities of Hindus in Canada. This course explores the ways in which Hindus

have attempted to maintain religious practice and cultural identity in pluralistic, non-Hindu societies.

RELI 347 *Religion and the Arts in South and Southeast Asia* (3 credits)

This introduction to the religious art of South and Southeast Asia makes special reference to Hindu and Buddhist architecture, sculpture, and painting. The course examines the ways in which sacred art is related to myth and symbol, religious values and goals, ritual, religious experience, and social and political realities.

NOTE: Students who have received credit for RELI 318 may not take this course for credit.

RELI 348 *Religion and Society in South and Southeast Asia* (3 credits)

This historical and sociological examination of religion's impact on and intersection with the structures of South and Southeast Asian society, explores such issues as caste and class, gender and family relations, links between religion and the state, and relations between Hindu, Buddhist, and Muslim communities.

NOTE: Student who have received credit for RELI 325 may not take this course for credit.

RELI 349 *Religions of China and Japan* (3 credits)

This course examines the history of the religious life of the people of China and Japan, exploring the interaction of Confucian, Taoist, Buddhist, and Shinto practices and beliefs.

NOTE: Students who have received credit for RELI 316 may not take this course for credit.

RELI 350 *Theravada Buddhism* (3 credits)

This examination of the early history, doctrine, and practices of Buddhism in India, is based on the Pali Canon, and on the development of Theravada Buddhism in the countries of Southeast Asia up to the present day.

NOTE: Students who have received credit for RELI 314 may not take this course for credit.

RELI 364 *Mahayana Buddhism* (3 credits)

This course studies the origins and evolution of the Mahayana Buddhist in India, and the spread and growth of various Mahayana traditions in East Asia. It examines developments in texts, doctrine, philosophy, ethical ideals, practices (worship and meditation), and institutions.

NOTE: Students who have received credit for RELI 315 may not take this course for credit.

RELI 365 *Religion and Literature* (3 credits)

This course deals with the questions raised for the study of religion by works of literature. An account is given of the recent development of interdisciplinary studies in religion and literature, and of the problems of method that have arisen. The relation between the interpretation of religious language, with its use of myth, parable, symbol and metaphor, and literary criticism is explored.

RELI 366 *Religion and Science* (3 credits)

This historical investigation of the reasons for the conflict between religion and science in Western culture includes an examination of the relations between religion and science in various religious traditions. It also considers the place of religious resources for contemporary issues of relationship with the natural world.

RELI 367 *Religions in Contact* (3 credits)

The experience of pluralism challenges the claim, in many religions, to possess the only true way to salvation. The course studies the historical and contemporary encounters between religions and the various responses generated within these traditions to religious diversity and specifically to each other.

**RELI 368 *Religion in Native Traditions*
(3 credits)**

This overview looks at the many diverse religious traditions of the First Nations populations in Canada. The course examines the sacred stories, ceremonial patterns, life cycle rituals, and religious activities in their varied expressions. Consideration is given to the historical interaction of native government with religious practices.

RELI 369 *Comparative Religious Ethics: West and East* (3 credits)

This course identifies the ways in which different religious and ideological traditions from West and East consider and deal with ethical issues. Examples of such traditions are Navaho, Jewish, Christian, Islamic, Hindu, Buddhist, Confucian, Humanist, and Communist. The ethical values and ideals found in these traditions, and their influence upon individual life patterns and social organization, are considered.

RELI 371 *Religion and Healing* (3 credits)

An examination of the interaction between religious conceptions and practices on the one hand and healing arts on the other. The course considers such phenomena as: shamanism; healing and Christian shrines; native healing rites; folk medicine of the Third World; modern spiritual healing groups; the contemporary dialogue between established forms of medicine, psychiatry, and religion in the twentieth century.

RELI 372 *The Human Body in Religious Faith and Practice* (3 credits)

This study of religious attitudes to the human body focuses on the body as a foundation for religious symbolism, religious community and identity, ritual, and religious experience. The course examines these problems with reference to various religious traditions. Issues examined include purification of the body; eating; mortification and mutilation of the body; attitudes towards dead bodies and physical immortality; attitudes towards bodies as gendered; embodied spirituality and incarnation.

**RELI 373 *Comparative Mysticism*
(3 credits)**

This comparative study examines primary reli-

gious texts from a variety of mystical traditions. Attention is also given to the methodological problems of definition and the representation of mystical experience raised by such modern thinkers as William James, Evelyn Underhill, R.C. Zaehner, W.T. Stace, Ninian Smart, and Steven Katz.

RELI 375 *Religion in Canada* (3 credits)

This course examines the role religion has played in the development of Canada as well as its influence in Canadian society, politics, and culture. Attention is paid as well to the interaction of different religious groups in the Canadian context. *NOTE: Students who have received credit for RELI 363 may not take this course for credit.*

**RELI 376 *Psychology of Religion*
(3 credits)**

This survey looks at various perspectives and methods used in psychology as they are relevant to understanding the role and value of religion for the individual. The course examines the ideas of such figures as William James, Freud, and Jung, among others, and considers such topics as intense religious experience, conversion, images of God, myth and symbol, ritual, and religious and moral development. *NOTE: Students who have received credit for RELI 343 may not take this course for credit.*

RELI 378 *Death and Dying* (3 credits)

This comparative study examines conceptions of death and dying among the major religious traditions. Attention is paid as well to exploring contemporary notions of death and dying both in so far as we are still informed by traditional conceptions and to the extent that, for many, such notions have lost their cogency. *NOTE: Students who have received credit for RELI 370 may not take this course for credit.*

RELI 380 *Sexuality in the History of Religions* (3 credits)

This historical examination looks at the development of attitudes towards sexuality within diverse religious traditions. Topics include human reproduction, gender roles and identity, celibacy, sexual variance, birth control, abortion, and homosexuality.

NOTE: Students who have received credit for RELI 335 may not take this course for credit.

**RELI 381 *Women and Religion: Judaism*
(3 credits)**

Prerequisite: Second-year standing or permission of the Department. This course explores the status and religious roles of women within the Judaic tradition. Its focus is on the practice of the religion, especially the ritual and legal spheres. The relationship between common practice, popular attitudes, and formal legal principles is examined in order to inquire into issues of gender and religion.

RELI 382 *Women and Religion: Christianity* (3 credits)

The focus of the course is the role of women

and the conflicting patterns of gender construction in the history of Christianity. Through a critical use of primary and secondary sources, both visual and textual, the course explores the sources of women's power and subordination in order to illuminate the relationship between gender and the Christian tradition.

RELI 383 *Women and Religion: Islam*
(3 credits)

The focus is on the writings of contemporary Muslim women authors, and on the debates relating to gender taking place in many Muslim countries.

RELI 384 *Women and Religion: Hinduism* (3 credits)

Prerequisite: Second-year standing or permission of the Department. This course examines the roles of women in Hindu religious life. The course focuses particularly on the impact of historical change; on the activities and experience of women in India, in the course of the last three thousand years; and on the relation between Hindu conceptions of "the feminine" and women's situation.

RELI 385 *Women and Religion: Buddhism* (3 credits)

Prerequisite: Second-year standing or permission of the Department. This course explores the situation, activities, and experiences of women within Buddhism. Using an historical approach, the course examines the circumstances of women in early Buddhism, and traces subsequent developments in India, Tibet, Southeast Asia, the Far East, and the West, up to the present day.

RELI 386 *Native North American Women and Their Religious Traditions*
(3 credits)

In the traditional religious systems of the First Nations people, women have had various roles, status, and experience. This overview of the different traditions includes life cycle rituals and the female perspective, female shamans and leadership, female ancestor and spirit stories, and the construction of gender in tribal society.

RELI 387 *Goddesses and Religious Images of Women* (3 credits)

This comparative survey of female divinity and feminine imagery studies various religious traditions. Among the issues to be explored are the imaging of goddesses as mothers; the conception of forces like fertility, energy, materiality, and knowledge as feminine; the correspondences and relations between goddesses and women; and the contemporary feminist recovery of the Goddess.

RELI 388 *Religious Women: Leaders, Models, and Rebels* (3 credits)

This course is an exploration of women's roles in religious traditions around the world — as nuns, teachers, saints, religious authorities and leaders, and founders of new religious movements.

Special consideration is given to the experiences and activities particular to women within various religions, and the way these are linked to women's diverse responses to "establishment" religion — rejecting it, changing it, participating in it, presenting alternatives to it.

RELI 389 *Women as Ritual Experts*
(3 credits)

This comparative examination of the contexts and patterns of women's ritual lives looks at various religious traditions. In addition to considering women's activities in formal or public ritual contexts, this course focuses especially on the importance of women as ritual specialists and authorities in the context of the home.

RELI 391 *Women and Jewish History I*
(3 credits)

This course examines the lives and experiences of Jewish women from the Late Antique period through and including the medieval period. Historical and geographic variations are highlighted as well as the differences between communal standards and individual exploits and accomplishments. Through a critical reading of Jewish historical sources, questions of methodology and scholarship are probed.

RELI 392 *Women and Jewish History II*
(3 credits)

This course examines the lives and experiences of Jewish women in the modern period. The immigration to North America and the subsequent development of the Jewish community provides the framework for investigating Jewish women's contribution to and encounter with modern Jewish life. The development of Jewish feminism and the consequent changes amongst the different denominations completes this survey.

RELI 393 *Special Topics in Religion and Culture* (3 credits)

Prerequisite: Permission of the Department. This course affords an opportunity for the advanced student to study a special theme or problem in religion and culture.

RELI 394 *Studies in Judaic Law*
(3 credits)

Prerequisite: RELI 220 or 326 or 327. By means of the analysis of particular issues and texts, this course explores the history and character of Judaic Law. Attention is given to the literatures, institutions, and social contexts out of which Judaic Law has developed.

RELI 395 *Studies in Jewish Philosophy*
(3 credits)

Prerequisite: RELI 220 or 327 or 328. By means of the analysis of particular issues, thinkers, and texts, this course explores the character of Jewish philosophy. Issues in Jewish philosophy that may be examined include the relationship between faith and reason, the understanding of God, Judaism and the inter-human, the powers and limits of philosophical understanding.

RELI 397 *Studies in Jewish Mysticism*
(3 credits)

Prerequisite: RELI 220 or 326 or 327. This survey of the Jewish mystical tradition places emphasis on the study of representative Jewish mystical texts. It includes the development of the messianic idea, Merkava mysticism, Hasidei Ashkenaz, Kabbala in Provence and Spain, Lurianic Kabbala, Sabbatianism, and Hasidism. *NOTE: Students who have received credit for RELI 354 may not take this course for credit.*

RELI 398 *Selected Topics in Religion*
(3 credits)

RELI 399 *Selected Topics in Religion*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

RELI 401 *Studies in Classical Hebrew Texts* (3 credits)

Prerequisite: HEBR 210, 250; or permission of the Department. A reading of representative selections of classical Hebrew texts. Attention is paid to the historical and philosophical background of the texts.

RELI 402 *Studies in Modern Hebrew Texts* (3 credits)

Prerequisite: HEBR 210, 250; or permission of the Department. A reading of representative selections of modern Hebrew literature as well as modern Hebrew scholarship.

RELI 403 *Questions from the Christian Tradition* (3 credits)

Prerequisite: Six credits in 300-level Christian Studies courses. This thematic study examines enduring religious questions and controversies in the history of Christian West, such as faith and reason, history and eschatology, freedom and authority.

NOTE: Students who have received credit for RELI 362 may not take this course for credit.

RELI 404 *Questions on Christianity and Modernity* (3 credits)

Prerequisite: Six credits in 300-level Christian Studies courses. The course examines some aspects of the complex relationship between Christianity and the modern ethos. Topics include individualism, secularisation, post-modernism.

RELI 405 *Approaches to the Study of Women and Religion: Advanced Seminar* (3 credits)

Prerequisite: Six credits in Women and Religion courses. This examination of the work of various feminist theoreticians and theologians explores

how their theoretical insights may be applied to the practice of doing research on women in religion. The course examines feminist reactions to, critiques of, and approaches to understanding historical religions, and explores ways in which these responses produce new ideas about sources to use and questions to ask in our study of these religions, and new possibilities for the meaning and relevance of religion.

RELI 406 *Feminist Hermeneutics and Scripture* (3 credits)

This feminist critical reading of sacred texts focuses on the rediscovery of women in holy scriptures. This course is for the advanced student able to work with primary sources. Different texts may be considered such as Hebrew Bible, New Testament, Koran, Hindu and Buddhist scriptures.

RELI 409 *Methodology and the Study of Religion* (3 credits)

This course examines the various methodological approaches that inform the comparative study of religion. Questions investigated pertain to the collection and interpretation of evidence, the types of resources available and techniques used, the complex differences between men's and women's religious experiences and expressions, as well as the impact of significant theoretical approaches on the analysis of religion.

RELI 410 *Honours Seminar* (6 credits)

Prerequisite: Honours standing in Religion or Judaic Studies. The student works with an individual faculty member in a particular field of religious or Judaic studies. Students are asked to produce a sustained piece of written work to be read by their adviser and at least one other member of the Department.

NOTE: Students who have received credit for RELI 499 may not take this course for credit.

RELI 493 *Religious Institutions*
(3 credits)

Prerequisite: Permission of the Department. Seminar on a particular period or institution in the history of religion.

RELI 495 *Religious Thinkers* (3 credits)

Prerequisite: Permission of the Department. Seminar on a particular thinker or school of thought in the history of religion.

RELI 498 *Advanced Topics in Religion*
(3 credits)

RELI 499 *Advanced Topics in Religion*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.300 SCIENCE AND HUMAN AFFAIRS

Faculty	Director ANDREW WAYNE, Associate Professor					
Location	Sir George Williams Campus Annex PR, Room: 202 (514) 848-2500					
Program Objectives	<p>The Science and Human Affairs program explores the social dimensions of science and technology. It provides an interdisciplinary examination of the cultural, economic, political, ethical, and environmental aspects of scientific and technological change. The curriculum is organized into three streams: the history and philosophy of science, the social and ethical aspects of science and technology, and the human dimensions of environmental change.</p> <p>The program prepares students for the growing number of non-science careers requiring an understanding of scientific research, technical innovation, and industrial development as well as an understanding of their social implications. It also provides science and engineering students with the opportunity to explore the social dimensions of their disciplines.</p>					
Programs	<p>Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value. Students should consult with the program coordinator prior to registering for Science and Human Affairs courses.</p> <table><tr><td>60 BA Specialization in Science and Human Affairs (See Note 1) 12 SCHA 203³, 204³, 250³, 251³ 3 Chosen from ECON 221³; GEOL 325³; PSYC 315³; SOCI 212³, 213³ 9 Chosen from PHYS 210⁶; BIOL 200⁶, 201³ or CHEM 205³, 206³, 208³, with not more than six credits in any single discipline 18 SCHA 353³, 354³, 355³, 356³, 453⁶ 12 Chosen from SCHA 260³, 351⁶, 452⁶, or cognates from list below* 6 SCHA 454⁶</td><td>30 Minor in Science and Human Affairs** 12 SCHA 203³, 204³, 250³, 251³ 18 Chosen from SCHA 260³, 351⁶, 353³, 354³, 355³, 356³, 452⁶, 453⁶, 454⁶, or cognates from list below*, with at least six SCHA credits</td></tr></table> <p>NOTE 1: Beginning January 1, 1997, no new students will be admitted into this program. Courses will continue to be scheduled to meet the needs of students in the program.</p> <table><tr><td>42 BA Major in Science and Human Affairs** 12 SCHA 203³, 204³, 250³, 251³ 3 Chosen from ECON 221³; GEOL 325³; PSYC 315³; SOCI 212³, 213³ 9 Chosen from PHYS 210⁶; BIOL 200⁶, 201³ or CHEM 205³, 206³, 208³, with not more than six credits in any single discipline</td><td><p>*Cognates relating to the history and philosophy of science include: BIOL 321; GEOG 391; GEOL 208; MATH 215, 397; PHIL 328, 329, 421; PSYC 320; SOCI 406, 407; SCOL 251, 252, 253, 270. Those more broadly concerned with science and society include: BIOL 210; POLI 363; ANTH 325.</p><p>Cognates treating environmental issues include: ECON 391, 496; GEOG 211, 271, 317.</p><p>**Admission suspended for 2001-02.</p></td></tr></table>		60 BA Specialization in Science and Human Affairs (See Note 1) 12 SCHA 203 ³ , 204 ³ , 250 ³ , 251 ³ 3 Chosen from ECON 221 ³ ; GEOL 325 ³ ; PSYC 315 ³ ; SOCI 212 ³ , 213 ³ 9 Chosen from PHYS 210 ⁶ ; BIOL 200 ⁶ , 201 ³ or CHEM 205 ³ , 206 ³ , 208 ³ , with not more than six credits in any single discipline 18 SCHA 353 ³ , 354 ³ , 355 ³ , 356 ³ , 453 ⁶ 12 Chosen from SCHA 260 ³ , 351 ⁶ , 452 ⁶ , or cognates from list below* 6 SCHA 454 ⁶	30 Minor in Science and Human Affairs** 12 SCHA 203 ³ , 204 ³ , 250 ³ , 251 ³ 18 Chosen from SCHA 260 ³ , 351 ⁶ , 353 ³ , 354 ³ , 355 ³ , 356 ³ , 452 ⁶ , 453 ⁶ , 454 ⁶ , or cognates from list below*, with at least six SCHA credits	42 BA Major in Science and Human Affairs** 12 SCHA 203 ³ , 204 ³ , 250 ³ , 251 ³ 3 Chosen from ECON 221 ³ ; GEOL 325 ³ ; PSYC 315 ³ ; SOCI 212 ³ , 213 ³ 9 Chosen from PHYS 210 ⁶ ; BIOL 200 ⁶ , 201 ³ or CHEM 205 ³ , 206 ³ , 208 ³ , with not more than six credits in any single discipline	<p>*Cognates relating to the history and philosophy of science include: BIOL 321; GEOG 391; GEOL 208; MATH 215, 397; PHIL 328, 329, 421; PSYC 320; SOCI 406, 407; SCOL 251, 252, 253, 270. Those more broadly concerned with science and society include: BIOL 210; POLI 363; ANTH 325.</p> <p>Cognates treating environmental issues include: ECON 391, 496; GEOG 211, 271, 317.</p> <p>**Admission suspended for 2001-02.</p>
60 BA Specialization in Science and Human Affairs (See Note 1) 12 SCHA 203 ³ , 204 ³ , 250 ³ , 251 ³ 3 Chosen from ECON 221 ³ ; GEOL 325 ³ ; PSYC 315 ³ ; SOCI 212 ³ , 213 ³ 9 Chosen from PHYS 210 ⁶ ; BIOL 200 ⁶ , 201 ³ or CHEM 205 ³ , 206 ³ , 208 ³ , with not more than six credits in any single discipline 18 SCHA 353 ³ , 354 ³ , 355 ³ , 356 ³ , 453 ⁶ 12 Chosen from SCHA 260 ³ , 351 ⁶ , 452 ⁶ , or cognates from list below* 6 SCHA 454 ⁶	30 Minor in Science and Human Affairs** 12 SCHA 203 ³ , 204 ³ , 250 ³ , 251 ³ 18 Chosen from SCHA 260 ³ , 351 ⁶ , 353 ³ , 354 ³ , 355 ³ , 356 ³ , 452 ⁶ , 453 ⁶ , 454 ⁶ , or cognates from list below*, with at least six SCHA credits					
42 BA Major in Science and Human Affairs** 12 SCHA 203 ³ , 204 ³ , 250 ³ , 251 ³ 3 Chosen from ECON 221 ³ ; GEOL 325 ³ ; PSYC 315 ³ ; SOCI 212 ³ , 213 ³ 9 Chosen from PHYS 210 ⁶ ; BIOL 200 ⁶ , 201 ³ or CHEM 205 ³ , 206 ³ , 208 ³ , with not more than six credits in any single discipline	<p>*Cognates relating to the history and philosophy of science include: BIOL 321; GEOG 391; GEOL 208; MATH 215, 397; PHIL 328, 329, 421; PSYC 320; SOCI 406, 407; SCOL 251, 252, 253, 270. Those more broadly concerned with science and society include: BIOL 210; POLI 363; ANTH 325.</p> <p>Cognates treating environmental issues include: ECON 391, 496; GEOG 211, 271, 317.</p> <p>**Admission suspended for 2001-02.</p>					
Courses	<p>Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.</p> <table><tr><td>SCHA 203 (also listed as GEOG 203) Canadian Environmental Issues (3 credits) This course explores a number of contemporary</td><td>and controversial environmental issues in Canada. It provides a general overview of the policy context of environmental decision-making, focusing in particular on the involvement of</td></tr></table>		SCHA 203 (also listed as GEOG 203) Canadian Environmental Issues (3 credits) This course explores a number of contemporary	and controversial environmental issues in Canada. It provides a general overview of the policy context of environmental decision-making, focusing in particular on the involvement of		
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aboriginal groups in natural resource management and the role of various levels of government, non-government organizations, the news media and the international community in sharing Canadian environmental policies. Issues explored in the course include national parks, animal rights, fisheries management, and northern development and environmental impact assessment.

NOTE: Students who have received credit for GEOG 203, INTE 254 or SCHA 254 may not take this course for credit.

SCHA 204 (also listed as GEOG 204)
Global Environmental Issues
(3 credits)

This course examines a number of global issues from an interdisciplinary perspective. The complex interactions and interdependencies among the biophysical, socio-economic, political, and cultural aspects of global environmental change are explored in relation to issues such as global warming, desertification, deforestation, declining biodiversity, and acid rain.

NOTE: Students who have received credit for GEOG 204, INTE 253 or SCHA 253 may not take this course for credit.

SCHA 250 Introduction to Science and Human Affairs I (3 credits)

The social and historical context of scientific and technological change. The reciprocal interactions of science with government, ideology, economic development, religion, literature, and social theory; science and the city; science and the control of human life; science and human liberation; new definitions of scientific responsibility may be considered.

NOTE: Students who have received credit for INTE 250 or PHIL 220 or 228 may not take this course for credit.

SCHA 251 Introduction to Science and Human Affairs II (3 credits)

A continuation of SCHA 250. This course may be taken independently.

NOTE: Students who have received credit for INTE 251 prior to 1990–91 may not take this course for credit.

SCHA 260 Science and Culture in the Western Tradition (3 credits)

Surveys the place of science in Western culture from the ancient Greeks until the present day. The aim of the course is to acquaint a non-specialist audience with how a scientific world-view has profoundly shaped modern-day society.

SCHA 298 Selected Topics in Science and Human Affairs (3 credits)

SCHA 299 Selected Topics in Science and Human Affairs (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCHA 318 (also listed as PHIL 318)
Philosophy of Biology
(3 credits)

Prerequisite: PHIL 220, or permission of the Department. This course examines a variety of philosophical issues in biology. Topics covered may include: fitness, function, units of selection, the nature of species, reductionism, biological explanation of human behaviour and the ethical and epistemological consequences of evolutionary theory.

NOTE: Students who have received credit for PHIL 318 may not take this course for credit.

SCHA 351 Astronomy, Cosmology and the Space Age (6 credits)

The nature of the universe as interpreted by relevant scientific theories; cosmology and the shape, size, and structure of the universe; possibility of intelligent life in the universe; social implications of space flight.

NOTE: Students who have received credit for INTE 351 prior to 1990–91 may not take this course for credit.

SCHA 353 Science and Society: From Ancient Times Until 1789
(3 credits)

Prerequisite: SCHA 250; SCHA 251, or permission of the director. This course surveys the history of science from the ancient Greeks until the French revolution, with an emphasis on the social history of science.

SCHA 354 Science and Society: Since 1789 (3 credits)

Prerequisite: SCHA 250; SCHA 251, or permission of the director. This course surveys the history of science from the French revolution until the present day, with an emphasis on the social history of science.

SCHA 355 Technology and Society: From Ancient Times Until 1780
(3 credits)

Prerequisite: SCHA 250; SCHA 251. This course deals with the social role and impact of technology from the ancient Greeks until the industrial revolution.

SCHA 356 Technology and Society: Since 1780 (3 credits)

Prerequisite: SCHA 250; SCHA 251. This course deals with the role and impact of technology in Western society from the industrial revolution until the present.

SCHA 398 Selected Topics in Science and Human Affairs (3 credits)

SCHA 399 Selected Topics in Science and Human Affairs (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCHA 452 *Advanced Study in the History of Science* (6 credits)

Prerequisite: Permission of the director. Seminar in a specific question in the history of science. The emphasis is on encouraging students to conduct historical investigation on their own under a professor's guidance. The specific content varies from year to year depending on the instructor.

SCHA 453 *Science and Public Policy* (6 credits)

Prerequisite: SCHA 250; SCHA 251, or permission of the director. This course deals with those public policy issues which involve a major component of science and technology, i.e., energy, environment, resources, health, etc. The course also covers the general relationships of science and government relating to the making of science and technology policy particularly emphasizing the Canadian context, but including such topics as technology aid and transfer.

NOTE: Students who have received credit for INTE 453 prior to 1990–91 may not take this course for credit.

SCHA 454 *Seminar in Science and Human Affairs* (6 credits)

Prerequisite: Six credits from SCHA 353, 354, 355, 356 and enrolment in Major or Specialization in Science and Human Affairs, or permission of the director. This seminar affords an

opportunity for intensive examination of an explicitly interdisciplinary theme.

NOTE: With the permission of the director, students may take this course twice for credit provided that a different subject is dealt with the second time, and will register under SCHA 455. NOTE: Students who have received credit for INTE 454 prior to 1990–91 may not take this course for credit.

SCHA 455 *Seminar in Science and Human Affairs* (6 credits)

Prerequisite: Permission of the director.
NOTE: Students who have received credit for SCHA 454 may register for SCHA 455 provided the subject matter is different. NOTE: Students who have received credit for INTE 455 prior to 1990–91 may not take this course for credit.

SCHA 498 *Advanced Topics in Science and Human Affairs* (3 credits)

SCHA 499 *Advanced Topics in Science and Human Affairs* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.310 SOCIOLOGY AND ANTHROPOLOGY

Faculty	<i>Chair</i> ANTHONY J. SYNNOTT, <i>Professor</i>	JOHN D. JACKSON BRIAN M. PETRIE JOSEPH SMUCKER
	Sociology <i>Professor</i> WILLIAM C. REIMER	Anthropology <i>Associate Professors</i> CHANTAL COLLARD HOMA HOODFAR DAVID HOWES CHRISTINE JOURDAN MARIE-NATHALIE LEBLANC DOMINIQUE LEGROS
	<i>Associate Professors</i> DANIELLE GAUVREAU EFIE GAVAKI GUY LeCAVALIER GREG NIELSEN FRANCES SHAVER	
	<i>Assistant Professors</i> ANOUK BÉLANGER NEIL GERLACH	Sociology and Anthropology <i>Associate Professors</i> VERED AMIT SALLY COLE
	<i>Adjunct Professors</i> JOHN P. DRYSDALE E. SUSAN HOECKER-DRYSDALE	
Location	<i>Loyola Campus</i> Vanier Extension, Room: VE 223 (514) 848-2155	<i>Sir George Williams Campus</i> J.W. McConnell Building, Room: LB 681 (514) 848-2140
Department Objectives	Sociology and Anthropology examine the processes of social and cultural life in diverse human societies, past and present. These core disciplines of the social sciences are closely linked to the humanities, since various aspects of culture and society concern them all. The celebration of diversity — cultural, ethnic, and racial — among the students and faculty as well as in the subject matter, is a hallmark of the Department. It offers a full range of undergraduate programs, including joint programs in both disciplines.	
Programs	<i>Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.</i>	
	60 BA Honours in Sociology 3 SOCI 203 ^{3*} 6 SOCI 212 ³ , 213 ³ 3 200-level ANTH credits 6 SOCI 300 ⁶ 6 SOCI 408 ⁶ 6 SOCI 409 ⁶ 6 SOCI 410 ⁶ 24 SOCI elective credits (maximum of six credits at the 200 level)	60 BA Joint Specialization in Anthropology and Sociology See Anthropology
	60 BA Specialization in Sociology 3 SOCI 203 ^{3*} 6 SOCI 212 ³ , 213 ³ 3 200-level ANTH credits 6 SOCI 300 ⁶ 6 Chosen from SOCI 310 ⁶ , 315 ⁶ , 410 ⁶ 6 SOCI 408 ⁶ 24 SOCI elective credits (maximum of six credits from the 200 level) 6 400-level SOCI credits	42 BA Major in Sociology 3 SOCI 203 ^{3*} 3 SOCI 212 ³ 3 200-level ANTH credits 6 SOCI 300 ⁶ 6 Chosen from SOCI 310 ⁶ , 315 ⁶ 21 SOCI elective credits (maximum of nine credits from the 200 level)
		42 BA Major in Community and Ethnic Studies 12 ANTH 202 ³ ; SOCI 203 ^{3*} , 212 ³ ; ANTH/SOCI 230 ³ 6 SOCI 310 ⁶ 6 Chosen from ANTH 311 ³ , 312 ³ , SOCI 300 ⁶

- 12 Chosen from ANTH 303³; SOCI 331³, 336³, 437³; ANTH/SOCI 276⁶, 315⁶, 352³, 353³, 379³, 380³, 381³, 385³
- 3 Chosen from cognate courses outside the Department which reflect an appropriate cross-cultural perspective and/or subject matter. This course will be chosen in consultation with the adviser.
- 3 ANTH/SOCI 433³

30 Minor in Sociology

- 3 SOCI 203^{3*}
- 6 200-level SOCI credits
- 6 Chosen from SOCI 300⁶, 310⁶, 315⁶
- 6 SOCI elective credits
- 9 300-level SOCI credits

**Students exempted from SOCI 203³ are required to take three credits from SOCI 200- or 300-level courses.*

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.:

- (1) 300-level courses are open to students who have successfully completed SOCI 203 or equivalent, plus at least three credits of 200-level Sociology courses. Students in related disciplines who wish to take cognate courses in Sociology may apply to the Sociology undergraduate adviser for waiver of prerequisites on the basis of equivalent background.
- (2) 400-level courses are open to students who have successfully completed at least six credits from 300-level SOCI courses.
- (3) Entry requirements for Sociology/Anthropology cross-listed courses depend on the discipline through which the course is entered. Once students have taken a cross-listed course under one disciplinary designation they may not take the course under the corresponding designation in the other discipline for credit.

SOCI 203 Introduction to Society (3 credits)

An introduction to the sociological study of society. The course begins with a consideration of the concepts, models, and methods used by sociologists. This is followed by an examination of selected substantive areas of social life, ranging from the relations between individuals and groups to total societies.

SOCI 212 Statistics I (3 credits)

Priority to enrol in this course is given to students who are in a Sociology or Anthropology program. This course provides an introduction to the basic principles of statistics for social scientists. Topics include the concept of the level of measurement, standardization, the interpretation of graphs, measures of univariate distributions, cross classification, elementary measures of association, the logic of controls, and the basic principles of inferential statistics. The emphasis is on the implications of these statistical techniques for theoretical understanding of sociology and anthropology.

NOTE See §200.7

SOCI 213 Statistics II (3 credits)

Prerequisite: SOCI 212. Priority to enrol in this course is given to students who are in a Sociology or Anthropology program. Students are encouraged to take SOCI 212 immediately preceding SOCI 213. This course is designed to follow Statistics I. Topics include measures of association, the principles of probability and sampling distributions, hypothesis testing, and tests of significance. The emphasis is on the implications of these statistical techniques for theoretical understanding in sociology and anthropology. *NOTE See §200.7*

SOCI 220 Social Organization (3 credits)

Examines the basic characteristics of societal organization through the use of comparative and evolutionary perspectives. Conceptual analysis of specific forms of and changes in the comprehensive pattern of social organization.

SOCI 230 Race and Ethnic Relations (3 credits)

Prerequisite: See N.B. number (3). Race and ethnicity are examined as bases of social differentiation. Ethnic group relations are analysed in relation to stratification and the exercise of power. The course further involves exploration of the phenomena of discrimination, prejudice, and intergroup accommodation.

SOCI 244 Sociology of Leisure (3 credits)

The course examines the effects of social, economic, and political institutions upon the structure and use of leisure time. The emphasis is upon historical changes and the implications of alienation, anomie, and inequality.

NOTE: Students who have received credit for SOCI 344 may not take this course for credit.

SOCI 261 Social Problems (3 credits)

Consideration of a range of social problems from a sociological perspective. Examination of the process by which "social problems" are socially defined and recognized.

SOCI 262 Social Deviance (3 credits)

Attention is focused on various forms of anti-social behaviour, particularly those that are socially induced. This course examines the nature, forms, sources, functions, and dysfunctions of deviations from social norms, and the mechanisms of social order and control. Deviance

is viewed as a social process of interaction and relationships that derive from the social structure and have consequences for it. Various forms of deviance are considered in terms of contemporary social theory and research.

SOCI 263 *Juvenile Crime and Delinquency* (3 credits)

This course examines the nature of juvenile crime and delinquency and their social causes and consequences. Juvenile crime and delinquency, as special kinds of deviance, receive the focus of attention, with emphasis on criminal justice, juvenile justice, criminal behaviour systems, and social policy on juvenile crime and delinquency.

SOCI 264 *Sociology of Sport* (3 credits)

This course provides a systematic analysis of the social influences upon sport in North America. Special attention is directed to the interrelationships between sport and various social institutions.

SOCI 274 *The Sociology of Aging* (6 credits)

This course examines the changes in society and in living conditions as populations and people age. The sources and the effects of these changes are looked at in the light of several substantive areas and in terms of their implications for social policy. While the major emphasis is on the Canadian experience, some comparative materials are used to widen the perspective.

SOCI 275 *Self and Society* (6 credits)

This course studies the basic concepts and theories regarding social definitions of the Self. Emphasis is placed on ideas regarding personality, motivation, and interpersonal attitudes, viewed in terms of the interplay between actors and social structures.

NOTE: Students who have received credit for SOCI 370 may not take this course for credit.

SOCI 276 *Gender and Society* (6 credits)

Prerequisite: See N.B. number (3). This course explores the social construction of gender categories both historically and in the present. The focus is upon examining the various theoretical perspectives which attempt to explain the ways in which society has organized "masculine" and "feminine" as the basis for social inequalities.

NOTE: Students who have received credit for SOCI 372 may not take this course for credit.

SOCI 280 *Québec Society* (6 credits)

Focus upon the historic changes in Québec society, with emphasis upon the period following the Second World War. Examination of issues which have provoked conflicting interpretations, including the Conquest, the nature of Confederation, Québec nationalism, and the language question.

SOCI 282 *Canadian Society* (6 credits)

Analysis of Canadian social structure and change; the relation of the whole of Canadian society to

its constituent elements; the relation of Canadian society to its international environment.

SOCI 298 *Selected Topics in Sociology* (3 credits)

SOCI 299 *Selected Topics in Sociology* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

SOCI 300 *Classical Social Theory* (6 credits)

Prerequisite: See N.B. number (1). This course involves an examination of the origins of sociology and of the sociological works of nineteenth- and early twentieth-century European theorists, with consideration of the social and political context. Particular emphasis is given to the works of Durkheim, Marx, and Weber. Readings include primary sources and critical commentaries.

SOCI 310 *Research Methods* (6 credits)

Prerequisite: See N.B. number (1); SOCI 212. This course aims at introducing the students to the concepts, language, and techniques of quantitative and qualitative research methods. It familiarizes the students with the initiation of research problems, the gathering of accurate data, their statistical analysis, and the interpretation and reporting of research findings. This course also introduces the student to the computer use of SPSSX.

SOCI 315 *Field Research* (6 credits)

Prerequisite: See N.B. numbers (1) and (3). This course provides the opportunity to study and practise qualitative research methods as they are used by sociologists and anthropologists. Students are taught systematic procedures for the collection of primary data using methods that include participant-observation and formal and informal interviewing.

NOTE: Students who have received credit for SOCI 313 or 314 may not take this course for credit.

SOCI 323 *Economy and Society* (3 credits)

Prerequisite: See N.B. number (1). This course examines the ways in which economic activities are legitimated or otherwise affected by social norms and values, and of the ways in which various social systems react to the strains created by the accommodation of new technology and of new industrial organizations.

SOCI 325 *Social Change* (3 credits)

Prerequisite: See N.B. number (1). This course examines the sources, mechanisms, and consequences of social and cultural change. Classical and contemporary theories of change are analysed, as well as significant empirical studies.

SOCI 331 Social Stratification (3 credits)
Prerequisite: See N.B. number (1). This course examines the dynamics of social stratification and differentiation, including economic distinctions and their consequences, social status, power, and mobility. Emphasis is placed upon Canadian society.

NOTE: Students who have received credit for SOCI 330 may not take this course for credit.

SOCI 333 Political Sociology (3 credits)
Prerequisite: See N.B. number (1). This course is concerned with the nature, organization, distribution, determinants, and consequences of power in social systems.

SOCI 336 Collective Behaviour (3 credits)
Prerequisite: See N.B. number (1). This course is concerned with the nature, emergence, and dynamics of short-term collective behaviour. Classical and contemporary interpretations of collective behaviour are examined. The course focuses on events such as riots and the emergence of violence in demonstrations related to current social problems and issues in Canada and the United States.

SOCI 338 Sociology of Religion
(3 credits)
Prerequisite: See N.B. number (1). This course presents an overview of the role of religion in society as found in the pertinent literature of sociology and anthropology. Special consideration is given to the relationship between religion and other social institutions, with particular attention to changes in the religious structures and practices in modern pluralistic societies.

SOCI 342 Sociology of Occupations
(3 credits)
Prerequisite: See N.B. number (1). This course examines the role played by occupations and the world of work in industrialized societies. Economic, social, psychological, and moral attributes of occupations are examined in relation to changing markets for labour. Specific problem areas to be covered include changes in the structure of professions, the effects of changing technology and organizational design on occupational requirements, issues in work and household demands, issues in employment equity and problems of unemployment.
NOTE: Students who have received credit for SOCI 343 may not take this course for credit.

SOCI 346 Industrialization (3 credits)
Prerequisite: See N.B. number (1). This course examines processes of industrialization. Analyses are directed primarily towards the Canadian experience and include a consideration of theories regarding industrialization in Canada; an examination of the social and economic impact of large-scale enterprises; the changing role of governments; the ongoing interaction between social organization and advanced technology; and contemporary thought on the social consequences of economic crises.

SOCI 347 Sociology of Labour-Management Relations
(3 credits)
Prerequisite: See N.B. number (1). This course involves the study of the shifting patterns in labour-management relations with a special focus on Canada. The course includes analyses of theories of management; the impact of the labour union movement, changes in the nature of the labour market; the significance of the growth of the service sector; the changing role of governments in labour-related issues; and contemporary thought on new forms of industrial organization.

SOCI 352 Population and Environment
(3 credits)
Prerequisite: See N.B. numbers (1) and (3); SOCI 212. Population and environment have become two of the most contested areas for theory, research, policy and public action. The course critically examines the pillars of the population and the environment discourses with attention to differences between developed and developing countries. It provides an overview of the evolution of demands for population control to a common acceptance of a reproductive rights perspective. Similarly, the course focuses on current debates on environment and the management of the global commons from both the industrialized and developing countries' perspectives.
NOTE: Students who have received credit for ANTH 352 may not take this course for credit.

SOCI 353 Community Studies (3 credits)
Prerequisite: See N.B. numbers (1) and (3); or permission of the Undergraduate adviser. This course involves the study of communities both as locales and as symbolic constructions. The major theoretical approaches used in community studies are evaluated in relation to research and applied interests. Special attention is given to sensitizing students to issues concerning gender, race, ethnicity, and class at the community level.

SOCI 355 Urban Regions (3 credits)
Prerequisite: See N.B. numbers (1) and (3). This course reviews the work of anthropologists and sociologists in cities. The focus is on the social organization of social life in First and Third World urban spaces. Consideration is also given to the particular dynamics of fieldwork in urban settings.
NOTE: Students who have received credit for ANTH 355 may not take this course for credit.

SOCI 358 Social Demography (3 credits)
Prerequisite: See N.B. number (1); SOCI 212. This course provides an introduction to the basic principles, issues, data, and methods of population studies. The emphasis in the course is on social factors that affect demographic processes (fertility, nuptiality, mortality, and migration), and the ways in which demographic change is related to social structure and social change.

SOCI 361 *Criminology* (3 credits)
Prerequisite: See N.B. number (1). The course analyses the emergence of criminology as a discipline, and reviews a range of contemporary theoretical perspectives on crime, criminal behaviour, and crime control.

SOCI 362 *Crime and Justice* (3 credits)
Prerequisite: See N.B. number (1). This course provides a critical analysis of the Canadian criminal justice system. The focus is on the process by which the accused is judged guilty or innocent, sentenced, punished or "corrected", and the treatment of the victim.

SOCI 363 *Law and Society* (3 credits)
Prerequisite: See N.B. numbers (1) and (3). This course situates the study of law in cross-cultural perspective. It involves an examination of the kinds of institutions found in place of courts in non-Western societies. This course also explores numerous issues of relevance to the legitimacy of contemporary Western legal systems, such as the relationship between law and morality, the idea of right prior to good, and the nature of legal reasoning.

SOCI 366 *The History and Sociology of Genocide to 1920* (3 credits)
This course is cross-listed with HIST 359.
Prerequisite: See N.B. numbers (1) and (3). Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that have led to it up to 1920.
NOTE: Students who have received credit for HIST 359 or 368 or SOCI 368 may not take this course for credit.

SOCI 367 *The History and Sociology of Genocide from 1920 to the Present* (3 credits)
This course is cross-listed with HIST 360.
Prerequisite: See N.B. numbers (1) and (3). Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that led to genocide from 1920 to the present.
NOTE: Students who have received credit for HIST 360 or 368 or SOCI 368 may not take this course for credit.

SOCI 375 *Social Construction of Sexuality* (3 credits)
Prerequisite: See N.B. numbers (1) and (3). This course provides a cross-cultural, interdisciplinary approach to the study of human sexuality. There are three major components. One explores the validity of contemporary sexual beliefs and attitudes. Another focuses on the extent to which sexual beliefs and behaviours are socially organized. A third provides an introduction to theories which examine how biological and/or social forces shape our sexual lives.
NOTE: Students who have received credit for this topic under a SOCI 398 number may not take this course for credit.

SOCI 376 *Socialization* (6 credits)
Prerequisite: See N.B. number (1). This course examines the social and cultural processes by which the individual becomes a functioning member of society. Attention is given to adult socialization and re-socialization in diverse institutional contexts such as schools, occupations, hospitals, prisons, the military. The relationship of social structure to role acquisition and role performance is a major focus of the course.
NOTE: Students who have received credit for SOCI 270 may not take this course for credit.

SOCI 378 *The Family* (6 credits)
Prerequisite: See N.B. number (1). The family as an institution is examined in relation to social structure and historical change. Special emphasis is placed on trends in the nuclear family patterns of contemporary North American society, and on the relation of the family to the broader societal environment.
NOTE: Students who have received credit for SOCI 272 may not take this course for credit.

SOCI 379 *Cross-Cultural Perspectives on Gender* (3 credits)
Prerequisite: See N.B. numbers (1) and (3). This course explores through different theoretical perspectives and ethnographic examples, cross-cultural differences in sex/gender systems. A comparative analysis of gender relations in band, tribal, and state societies is undertaken. Topics discussed include the sexual division of labour, the cultural and social construction of gender, and the impact of economic development.

SOCI 380 *Contemporary Issues in Human Rights* (3 credits)
Prerequisite: See N.B. numbers (1) and (3). The course develops, through case analysis, insight into the differing priorities and competing concepts of human rights and human dignity in "non-Western" cultural traditions as well as in "Western" societies. It explores the significance of religious and other ideological positions in the use and abuse of human rights by governments, extra-governments, international bodies, as well as the general public. The course also examines topics such as women's human rights, sexuality and human rights, and human rights in development, the limits of sovereignty, and state accountability.
NOTE: Students who have received credit for ANTH 380 may not take this course for credit.

SOCI 381 *Ethnic Communities in Canada* (3 credits)
Prerequisite: See N.B. numbers (1) and (3). This course aims at familiarizing students with the social factors and dynamics of contemporary ethno-cultural communities in Canada. Topics may include the immigration process and settlement; community development, structures, and organizations; the ethnic family; socio-economic status and achievement; cultural continuity and change; minority-majority relations and relations with other ethno-cultural communities.

SOCI 385 *Globalization and Transnationality* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). Globalization has been used generally to denote the increasingly rapid and far-flung circulation of people, money, commodities, and images around the world. This course introduces students to a sample of issues covered by anthropologists and sociologists in respect to this process, while at the same time also exploring transnational social networks that cross state borders but are not necessarily global in scope.
NOTE: Students who have received credit for ANTH 385 may not take this course for credit.

SOCI 398 *Selected Topics in Sociology* (3 credits)

SOCI 399 *Selected Topics in Sociology* (6 credits)

Prerequisite: See N.B. number (1). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

SOCI 401 *The History of Social Thought* (6 credits)

Prerequisite: See N.B. number (2). This course presents an overview of the various ideas and schools of thought which attempt to explain the organization, development, and change of various aspects of human societies. The emphasis is on the philosophical underpinnings of the discipline of sociology. The timespan ranges from ancient Greek social thought to early nineteenth-century European thought in which sociology was founded.

SOCI 404 *Sociology of Literature* (3 credits)

Prerequisite: See N.B. number (2); or permission of the Undergraduate adviser. This course presents a critical study of literature and para-literature as a cultural and social practice. Various approaches to the sociology of literature are examined. The emphasis is on the social genesis of literature. Selected texts of Canadian fiction and drama are analysed.

SOCI 406 *Sociology of Knowledge* (3 credits)

Prerequisite: See N.B. number (2). This course examines a variety of theories of the relation of knowledge and belief to social contexts.

SOCI 408 *Contemporary Sociological Theory* (6 credits)

Prerequisite: See N.B. number (2); SOCI 300. This course examines major developments in social theory against the background supplied by the classic projects of Marx, Durkheim, Simmel, and Weber. Particular emphasis is placed on contested substantive, methodological, and practical conceptions of social structure, culture, and human agency in contemporary schools of sociology such as functionalism, neomarxism, structuralism, critical theory, hermeneutical

theory, social constructionism, rational exchange theories, and post-modernist thought.
NOTE: Students who have received credit for SOCI 402 or 403 may not take this course for credit.

SOCI 409 *Honours Seminar* (6 credits)

Prerequisite: See N.B. number (2); SOCI 410; and permission of the Honours adviser. This course involves the student formulating an Honours research proposal, and the research and writing of an Honours paper.

SOCI 410 *Research Design and Analysis* (6 credits)

Prerequisite: See N.B. number (2); SOCI 212, 213. This course looks at quantitative methods of data collection and analysis. Topics include experimental and quasi-experimental design, principles of measurement, survey design, secondary data sources, techniques of multivariate analysis, and interpretation.

SOCI 430 *Development Debates* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course considers the systematic reduction of poverty and powerlessness at individual and societal levels. Several development problems are examined, including national debt crisis, population growth, urbanization, and various degrees of state withdrawal from regulating the market. Special emphasis is given to case studies from major regions of the Third World on the varied impact of development on gender relations and on the eradication of social and economic inequalities.

NOTE: Students who have received credit for ANTH 430 may not take this course for credit.

SOCI 433 *Theories of Identity* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course discusses theories of difference, pluralism, exclusion, nationalism, and racism within broader frameworks such as citizenship, multiculturalism, diaspora or transnationalism. This course will therefore review related theories of identity as these are currently addressed within anthropology/sociology and related disciplines.

NOTE: Students who have received credit for SOCI or ANTH 432, or ANTH 433 may not take this course for credit.

SOCI 437 *Social Movements* (3 credits)

Prerequisite: See N.B. number (2). The nature, emergence, and dynamics of organized collective behaviour and social movements are examined in light of classical and contemporary theories. The course focuses on the impact of leadership, organizational resources, and discontent with institutionalized social relations on social movements. Contemporary social movements in Québec, the rest of Canada, and the U.S. serve as illustrations.

NOTE: Students who have received credit for SOCI 337 may not take this course for credit.

**SOCI 445 *Sociology of Labour
Movements* (3 credits)**

Prerequisite: See N.B. number (2). This course analyses the origins and development of labour movements as well as contemporary characteristics of union organizations within the context of their social, political, and economic environments. Emphasis upon Canada and Québec.
NOTE: Students who have received credit for SOCI 345 may not take this course for credit.

**SOCI 450 *Seminar in Urban and
Metropolitan Studies* (6 credits)**

Prerequisite: See N.B. number (2). This course presents an intensive study of selected theories and monographs dealing with aspects of urbanization.

**SOCI 457 *Population and Society*
(3 credits)**

Prerequisite: See N.B. number (2). This course involves a critical examination of the relationship between population and society. This course treats both theoretical and applied aspects of this relationship, with particular emphasis on the problem of population and resources and the examination of social and demographic policies in the developed and the developing world.
NOTE: Students who have received credit for SOCI 357 may not take this course for credit.

SOCI 472 *Youth Culture* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course is concerned with the cultural agency of youth, with particular emphasis on the study of peer groups. The production of culture by youth is examined through a wide range of anthropological and sociological studies.

**SOCI 474 *Symbols, Rituals, and the
Body* (3 credits)**

Prerequisite: See N.B. numbers (2) and (3). This course examines the social roles of the body. Topics include body image and self-esteem, the symbolism of beauty and ugliness, height, hair, dress, the face, body language, health and fitness, eating and drinking patterns. The subject

is considered in anthropological and sociological perspectives.

NOTE: Students who have received credit for SOCI 374 or ANTH 474 may not take this course for credit.

**SOCI 475 *Men and Masculinist Theory*
(3 credits)**

Prerequisite: See N.B. numbers (2) and (3). This course is a review of the various and changing roles of men, the meanings of masculinity across cultures and the emerging men's movements. In a dialogue with feminism, the course moves towards humanism.

NOTE: Students who have received credit for ANTH 475 or for this topic under a SOCI/ANTH 498 number may not take this course for credit.

**SOCI 476 *Feminist Sociological Theories*
(3 credits)**

Prerequisite: See N.B. number (2). Analysis of recent debates and perspectives within feminist social theory, in particular the concepts of gender, equality, difference, identity, and power; feminist dialogues with, and critiques of, sociological theory.

SOCI 480 *Victorian Sociology* (3 credits)

Prerequisite: See N.B. number (2). This course provides the opportunity to study the lives and writings of women and men of the nineteenth century who contributed to the understanding of society and to the emergence of British and American sociology. The research and writings studied include those of Martineau, Tocqueville, Mill, Marx, Engels, Tristan, Maine, Spencer, Harrison, Mayhew, Booth, Gilman, Besant, Veblen, and Webb.

**SOCI 498 *Advanced Topics in Sociology*
(3 credits)**

**SOCI 499 *Advanced Topics in Sociology*
(6 credits)**

Prerequisite: See N.B. number (2). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

Programs

ANTHROPOLOGY

60 BA Honours in Anthropology

- 3 ANTH 202^{3*}
- 3 SOCI 212³
- 6 200-level ANTH credits
- 3 200-level SOCI credits
- 3 ANTH 212³
- 6 ANTH 311³, 312³
- 6 ANTH 315⁶
- 12 300- or 400-level ANTH credits
- 6 ANTH 495⁶
- 12 400-level ANTH credits

60 BA Specialization in Anthropology

- 3 ANTH 202^{3*}
- 3 SOCI 212³

- 6 200-level ANTH credits
- 3 200-level SOCI credits
- 3 ANTH 212³
- 6 ANTH 311³, 312³
- 6 ANTH 315⁶
- 30 300- or 400-level ANTH credits
(maximum of 15 credits from the 300 level)

**60 BA Joint Specialization in
Anthropology and Sociology**

- 3 ANTH 202^{3*}
- 3 SOCI 203^{3**}
- 6 SOCI 212³, 213³
- 6 ANTH 311³, 312³

- 6 SOCI 300⁶
- 6 Chosen from SOCI 310⁶, 315⁶, 410⁶
- 12 Chosen from ANTH/SOCI 353³, 355³, 363³, 375³, 379³, 381³, 430³, 472³
- 6 400-level ANTH credits
- 6 400-level SOCI credits
- 6 ANTH or SOCI credits

- 42 BA Major in Anthropology**
- 3 ANTH 202^{3*}
- 3 200-level ANTH credits
- 3 200-level ANTH or SOCI credits
- 3 200-level SOCI credits
- 6 ANTH 311³, 312³
- 12 300- or 400-level ANTH credits
- 12 400-level ANTH credits

- 30 Minor in Anthropology**
- 3 ANTH 202^{3*}
- 3 200-level ANTH credits
- 3 200-level ANTH or SOCI credits
- 6 ANTH 311³, 312³
- 12 300-level ANTH credits
- 3 400-level ANTH credits

**Students exempted from ANTH 202³ are required to take three credits from ANTH 200- and 300-level courses.*

***Students exempted from SOCI 203³ are required to take three credits from SOCI 200- or 300-level courses.*

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.:

- (1) 300-level courses are open to students who have successfully completed ANTH 202 or equivalent, plus at least three credits of 200-level Anthropology courses.
- (2) 400-level courses are open to students who have successfully completed ANTH 311 and 312, plus at least six credits of 300-level Anthropology courses or permission of the Anthropology adviser.
- (3) Entry requirements for Sociology/Anthropology cross-listed courses depend on the discipline through which the course is entered. Once students have taken a cross-listed course under one disciplinary designation they may not take the course under the corresponding designation in the other discipline for credit.

ANTH 202 Introduction to Culture (3 credits)

An introduction to the anthropological study of culture. The course begins with a consideration of the concepts, models, and methods used by anthropologists. This is followed by an examination of the many ways in which peoples of the world, past and present, have organized the activities, institutions, and belief systems that sustain social life. The course concludes with a discussion of the relevance of cultural anthropology to contemporary issues.

ANTH 203 Culture and Biology: An Anthropological Perspective (3 credits)

This course focuses on the interrelationship between culture and human biology. The first part of the course examines current debates about human origins, human variation, and the influence of cultural adaptation on human biology. This is followed by a critical examination of the strategies of sociobiology for the study of socio-cultural phenomena.

ANTH 204 Native Peoples of North America (3 credits)

Focusing primarily on the Native peoples of Canada, this course examines the ecological, economic, social, and religious aspects of Native cultures. A representative society from each geographic area of Canada is studied. This course is primarily ethnographic in emphasis, but it also seeks to provide some of the social and historical background necessary to understand the current situation of Native communities.

ANTH 212 Elements of Ethno-Linguistics (3 credits)

This is an introductory course which explores the relationship between language and culture, and the use of language in society. Major issues and debates in ethno-linguistics, socio-linguistics, and philosophy of language are examined.

ANTH 221 Symbolic Anthropology (3 credits)

This course examines alternative theoretical approaches to the study of the role of symbols in society. The course is devoted to a consideration of the contributions of structural, psychoanalytic, and interpretive anthropology.

NOTE: Students who have received credit for ANTH 421 or 426 may not take this course for credit.

ANTH 230 Race and Ethnic Relations (3 credits)

Prerequisite: See N.B. number (3). Race and ethnicity are examined as bases of social differentiation. Ethnic group relations are analysed in relation to stratification and the exercise of power. The course includes explorations of the phenomena of discrimination, prejudice, and intergroup accommodation.

ANTH 231 Culture and Commerce (3 credits)

This course explores the influence of cultural values on the organization of the production, distribution or marketing, and the consumption of goods and services at both the local and global levels of the world economy. It also

examines the social and environmental impact of the globalization of the consumer society.

ANTH 270 *Anthropology and Contemporary Issues* (3 credits)

This course examines contemporary world issues from a cross-cultural perspective. Discussion ranges from a critical examination of anthropological concepts and methods to a consideration of some of the practical or applied uses of anthropology. Specific topics include the consequences of underdevelopment, modernization, and the place of folk cultures and tradition in an increasingly global society.

NOTE: Students who have received credit for ANTH 370 may not take this course for credit.

ANTH 272 *Comparative Culture* (3 credits)

This course is a general introduction to social and cultural anthropology. It examines the ways in which anthropologists use the comparative method to understand cultures in their unity and diversity. The focus is upon reading ethnographies.

ANTH 276 *Gender and Society* (6 credits)

Prerequisite: See N.B. number (3). This course explores the social construction of gender categories both historically and in the present. The focus is upon examining the various theoretical perspectives which attempt to explain the ways in which society has organized "masculine" and "feminine" as the basis for social inequalities.

NOTE: Students who have received credit for SOCI 372 may not take this course for credit.

ANTH 298 *Selected Topics in Anthropology* (3 credits)

ANTH 299 *Selected Topics in Anthropology* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

ANTH 302 *Art, Aesthetics, and Anthropology* (3 credits)

Prerequisite: See N.B. number (1). This course examines the relationship between art and society. It is mainly concerned with analysing how art may function as a means of signifying and perpetuating a given social order. Examples of artistic practice are drawn from diverse North and South American, African, and Melanesian cultures.

ANTH 303 *Indigenous Cultures Today* (3 credits)

Prerequisite: See N.B. number (1). A selection of case studies from around the world and in particular from South and North America. The course focuses on the rights of indigenous peoples, the question of cultural survival, the contribution indigenous cultures make to world cultural diversity, and on the ways they help us to understand what it is to be human through the comparative method.

ANTH 305 *Culture and History* (3 credits)

Prerequisite: See N.B. number (1). This course analyses some of the ways "history" has been understood both in our own and other cultures, including history as legitimating charter, as repeating cycle, as a scientific inquiry, as a series of unique events, and as a basis for ethical judgements.

ANTH 307 *Understanding Myths* (3 credits)

Prerequisite: See N.B. number (1). This course presents a survey of current anthropological theories of the nature and function of myths.

The course also analyses competing interpretations of some classic Western myths, and concludes with an examination of mythmaking in contemporary Western culture.

ANTH 311 *European Anthropological Theories* (3 credits)

Prerequisite: See N.B. number (1). This course provides the student with a critical perspective on the historical development of theory in anthropology. Students are introduced to evolutionism, functionalism, structuralism, marxism, and postmodernism by rereading original texts and classical and contemporary ethnography. The role that fieldwork plays in "unmaking" theory in anthropology is explored. Emphasis is placed on the history and critique of British and European anthropological traditions.

NOTE: Students who have received credit for ANTH 310 may not take this course for credit.

ANTH 312 *North-American Anthropological Theories* (3 credits)

Prerequisite: See N.B. number (1). This course provides the student with a critical perspective on the historical development of theory in anthropology. Students are introduced to evolutionism, functionalism, structuralism, marxism, and postmodernism by rereading original texts and classical and contemporary ethnography. The role that fieldwork plays in "unmaking" theory in anthropology is explored. Emphasis is placed on the history and critique of American anthropological traditions.

NOTE: Students who have received credit for ANTH 310 may not take this course for credit.

ANTH 315 *Field Research* (6 credits)

Prerequisite: See N.B. numbers (1) and (3). This course provides the opportunity to study and practise qualitative research methods as they are used by sociologists and anthropologists. Students learn systematic procedures for the collection of primary data using methods that include participant-observation and formal and informal interviewing.

NOTE: Students who have received credit for SOCI 313 or 314 may not take this course for credit.

ANTH 323 *Peoples and Cultures of the Middle East* (3 credits)

Prerequisite: See N.B. number (1). This course explores the diversity of religious practices,

social values, economic organization, and family and gender relations in several different Middle Eastern societies by examining ethnographic material on transformations and continuities in the lives of urban and rural people.

ANTH 324 *Peoples and Cultures of Oceania* (3 credits)

Prerequisite: See N.B. number (1). This course presents an overview of the peoples and cultures of Oceania, with particular emphasis on Melanesia. In addition to studying the peopling of the Pacific, the course delves into a range of classic anthropological topics, and addresses contemporary issues of gender, migration, and urbanization.

NOTE: Students who have received credit for this topic under an ANTH 398 number may not take this course for credit.

ANTH 325 *Magic, Science, Religion, and Ideology* (3 credits)

Prerequisite: See N.B. number (1). This course analyses belief systems and their attendant rituals and practices. The focus is on how anthropologists differentiate between magic, science, religion, and ideology, and how anthropologists understand the relationship between belief systems and reality.

ANTH 326 *Peoples and Cultures of Sub-Saharan Africa* (3 credits)

Prerequisite: See N.B. number (1). The course gives a broad historical and geographical survey of the region, and discusses, through case studies, older and contemporary topics, debates, and issues of African anthropology.

ANTH 332 *Health, Illness and Healing in Cross-Cultural Perspective* (3 credits)

Prerequisite: See N.B. number (1). This course involves the exploration of a series of alternatives to Western ways of defining health and treating sickness, with particular emphasis on shamanistic and East Asian medicine. The major part of the course is devoted to the study of ethnomedicine, and exploring some of the central questions of transcultural psychiatry. The course concludes with a discussion of the role of the anthropologist in international health-planning.

NOTE: Students who have received credit for this topic under an ANTH 398 number may not take this course for credit.

ANTH 352 *Population and Environment* (3 credits)

Prerequisite: See N.B. numbers (1) and (3); SOCI 212. Population and environment have become two of the most contested areas for theory, research, policy and public action. The course critically examines the pillars of the population and the environment discourses with attention to differences between developed and developing countries. It provides an overview of the evolution of demands for population control to a common acceptance of a reproductive rights perspective. Similarly, the course focuses on current debates on environment and the management of

the global commons from both the industrialized and developing countries' perspectives.

NOTE: Students who have received credit for SOCI 352 may not take this course for credit.

ANTH 353 *Community Studies* (3 credits)

Prerequisite: See N.B. numbers (1) and (3).

This course involves the study of communities as locales and as symbolic constructions. The major theoretical approaches used in community studies are evaluated in relation to research and applied interests. Special attention is given to sensitizing students to issues concerning gender, race, ethnicity, and class at the local level.

ANTH 355 *Urban Regions* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course reviews the work of anthropologists and sociologists in cities. The focus is on the social organization of social life in First and Third World urban spaces. Consideration is also given to the particular dynamics of fieldwork in urban settings.

NOTE: Students who have received credit for SOCI 355 may not take this course for credit.

ANTH 361 *Kinship* (3 credits)

Prerequisite: See N.B. number (1). This course addresses both classical and contemporary issues in kinship studies, with particular emphasis on the following areas: filiation, adoption, descent, genealogies; rules of residency, private and public spheres; incest, sex, and marriage; terminologies and attitudes.

ANTH 363 *Law and Society* (3 credits)

Prerequisite: See N.B. numbers (1) and (3).

This course situates the study of law in cross-cultural perspective. It involves an examination of the kinds of institutions found in place of courts in non-Western societies. The course also explores numerous issues of relevance to the legitimacy of contemporary Western legal systems, such as the relationship between law and morality, the idea of right prior to good, and the nature of legal reasoning.

ANTH 371 *Peasant Societies and Cultures* (3 credits)

Prerequisite: See N.B. number (1). This course examines agrarian societies in different cultural and political contexts. The course begins with a brief discussion of the archaeological evidence for early and later Neolithic agriculturalists. This is followed by an examination of peasantries, their persistence and transformation. The course concludes with a discussion of the role that subsistence producers play in contemporary societies.

ANTH 375 *Social Construction of Sexuality* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course provides a cross-cultural, interdisciplinary approach to the study of human sexuality. There are three major components. One explores the validity of contemporary sexual beliefs and attitudes. Another focuses on the extent to which sexual beliefs and behaviours are socially organized. A third provides an introduction to theories which examine how biological and/or social forces shape our sexual lives.

ANTH 379 *Cross-Cultural Perspectives on Gender* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). The course explores through different theoretical perspectives and ethnographic examples, cross-cultural differences in sex/gender systems. A comparative analysis of gender relations in band, tribal, and state societies is undertaken. Topics discussed include the sexual division of labour, the cultural and social construction of gender, and the impact of economic development. *NOTE: Students who have received credit for ANTH 308 may not take this course for credit.*

ANTH 380 *Contemporary Issues in Human Rights* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). The course develops, through case analysis, insight into the differing priorities and competing concepts of human rights and human dignity in "non-Western" cultural traditions as well as in "Western" societies. It explores the significance of religious and other ideological positions in the use and abuse of human rights by governments, extra-governments, international bodies, as well as the general public. The course also examines topics such as women's human rights, sexuality and human rights, and human rights in development, the limits of sovereignty, and state accountability. *NOTE: Students who have received credit for SOCI 380 may not take this course for credit.*

ANTH 381 *Ethnic Communities in Canada* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course aims at familiarizing students with the social factors and dynamics of contemporary ethno-cultural communities in Canada. Topics may include the immigration process and settlement; community development, structures, and organizations; the ethnic family; socio-economic status and achievement; cultural continuity and change; minority-majority relations and relations with other ethno-cultural communities.

ANTH 385 *Globalization and Transnationality* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). Globalization has been used generally to denote the increasingly rapid and far-flung circulation of people, money, commodities, and images around the world. This course introduces students to a sample of issues covered by anthropologists and sociologists in respect to this process, while at the same time also exploring transnational social networks that cross state borders but are not necessarily global in scope. *NOTE: Students who have received credit for SOCI 385 may not take this course for credit.*

ANTH 398 *Selected Topics in Anthropology* (3 credits)

ANTH 399 *Selected Topics in Anthropology* (6 credits)

Prerequisite: See N.B. number (1). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

ANTH 420 *Psychological Anthropology* (3 credits)

Prerequisite: See N.B. number (2). This course examines and critiques the theoretical concepts of Western academic and folk psychology from the perspective of the psychologies of other cultures. Topics considered include the cultural construction of the emotions, personality development, perception, culture-bound psychiatric syndromes (such as windigo psychosis, amok), and altered states of consciousness, and indigenous theories of dream interpretation.

ANTH 422 *Post-Modern Anthropology* (3 credits)

Prerequisite: See N.B. number (2). A further examination of alternative theoretical approaches to the understanding of the symbolic. The course focuses on the contributions of literary theory, the philosophy of pragmatism, and post-structuralist and anti-psychoanalytic thought, to current debate in anthropology. *NOTE: Students who have received credit for ANTH 426 may not take this course for credit.*

ANTH 423 *Political Anthropology* (3 credits)

Prerequisite: See N.B. number (2). This course examines the political process and political organization in cross-cultural perspective. The focus is on how order is achieved in the absence of the state, as well as questions of leadership, power, and authority in different social contexts. *NOTE: Students who have received credit for ANTH 459 may not take this course for credit.*

ANTH 425 *Religions in the Twenty-First Century* (3 credits)

Prerequisite: See N.B. number (2). This course examines the contemporary roles of religion as systems of meaning, a focus of social claims, and as elements of self-expression. This discussion is set within the historical trajectories of instances of globalization, such as colonization and the spread of world religions, conversions to Christianity and liberation theories, the politicization of Islam, or the emergence of New Age religions as new forms of identity.

ANTH 430 *Development Debates* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course considers the systematic reduction of poverty and powerlessness at individual and societal levels. Several development problems are examined, including national debt crisis, population growth, urbanization, and various degrees of state withdrawal from regulating the market. Special emphasis is given to case studies from major regions of the Third World on the varied impact of development on gender relations and on the eradication of social and economic inequalities. *NOTE: Students who have received credit for SOCI 430 may not take this course for credit.*

ANTH 431 *Neo-Marxism and Cultures*
(3 credits)

Prerequisite: See N.B. number (2). This course analyses the relationships between economy and cultural systems. The first section is devoted to the concept of economic base and superstructure in the industrial world; the second section focuses on selected case studies of non-industrial cultures and industrial cultures. The course concludes with an appraisal of the quality of economic life in non-industrial cultures.

NOTE: Students who have received credit for ANTH 401 or 402 may not take this course for credit.

ANTH 433 *Theories of Identity* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course discusses theories of difference, pluralism, exclusion, nationalism, and racism within broader frameworks such as citizenship, multiculturalism, diaspora or transnationalism. This course will therefore review related theories of identity as these are currently addressed within anthropology/sociology and related disciplines.

NOTE: Students who have received credit for ANTH or SOCI 432, or SOCI 433 may not take this course for credit.

ANTH 440 *Culture, Language, and Mind*
(3 credits)

Prerequisite: See N.B. number (2); ANTH 212. This course looks at the relationship between linguistics and anthropology, and examines some of the issues in the linkage between language, culture, and thought.

NOTE: Students who have received credit for ANTH 306 may not take this course for credit.

ANTH 463 *Current Debates in Kinship*
(3 credits)

Prerequisite: See N.B. number (2). From its inception, the anthropological investigation of kinship has been centred around organization and regulation of so-called biological facts such as procreation and genetic relatedness or "consanguinity". The course examines how international adoption, new reproductive technologies, and gay and lesbian kinship reshape the way people think about kinship.

NOTE: Students who have received credit for ANTH 461 or 462 may not take this course for credit.

ANTH 465 *Legal Anthropology* (3 credits)

Prerequisite: See N.B. number (2). This course analyses the legal system as an institutionalized system of social control and meanings, using historical and comparative data. Special attention is given to the study of the interface of law and other areas of sociological inquiry, including social change, conflict, and decision-making.

ANTH 471 *Anthropology of Food*
(3 credits)

Prerequisite: See N.B. number (2). This course approaches food through four main themes: archaeology of food production (domestication of plants and animals); class, cuisine, and the

development of taste; cosmic and other symbolism of food; and the political economy of food and hunger.

NOTE: Students who have received credit for ANTH 340 may not take this course for credit.

ANTH 472 *Youth Culture* (3 credits)

Prerequisite: See N.B. numbers (2) and (3).

This course is concerned with the cultural agency of youth, with particular emphasis on the study of peer groups. The production of culture by youth is examined through a wide range of anthropological and sociological studies.

ANTH 474 *Symbols, Rituals, and the Body* (3 credits)

Prerequisite: See N.B. numbers (2) and (3).

This course examines the social roles of the body. Topics include body image and self-esteem, the symbolism of beauty and ugliness, height, hair, dress, the face, body language, health and fitness, eating and drinking patterns. The subject is considered in anthropological and sociological perspectives.

NOTE: Students who have received credit for SOCI 374 or 474 may not take this course for credit.

ANTH 475 *Men and Masculinist Theory*
(3 credits)

Prerequisite: See N.B. numbers (2) and (3).

This course is a review of the various and changing roles of men, the meanings of masculinity across cultures and the emerging men's movements. In a dialogue with feminism, the course moves towards humanism.

NOTE: Students who have received credit for SOCI 475 or for this topic under an ANTH/SOCI 498 number may not take this course for credit.

ANTH 479 *Feminism and Anthropology*
(3 credits)

Prerequisite: See N.B. number (2). This course explores the dialogue between feminist theory and anthropology. Topics discussed include "feminist standpoint" theory and the critique of "objectivity" in feminist philosophy of science; feminist contributions to the historical development of anthropological theory; and the relationship between feminism and postmodernism in current debates on ethnography and fieldwork.

ANTH 495 *Honours Essay* (6 credits)

Prerequisite: See N.B. number (2); ANTH 315; and permission of the Honours adviser. Under the supervision of an Anthropology staff member, the student prepares an Honours essay on a subject chosen in consultation with and approved by the professor.

ANTH 498 *Advanced Topics in Anthropology* (3 credits)

ANTH 499 *Advanced Topics in Anthropology* (6 credits)

Prerequisite: See N.B. number (2). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

31.320 TEACHING OF ENGLISH AS A SECOND LANGUAGE

Faculty	Acting Director PATSY M. LIGHTBOWN, Professor	V. ALEX SHARMA JOANNA L. WHITE
	Professor RONALD MACKAY	Assistant Professor MEKHALA SARKAR
	Associate Professors PALMER ACHESON ELIZABETH GATBONTON	
Location	Sir George Williams Campus Annex EN, Room: 209 (514) 848-2450	
Objectives	<p>The work of the TESL Centre is to prepare teachers and other professionals to develop, staff, manage, and evaluate English as a Second Language (ESL) programs.</p> <p>Through the Centre, students earn either an undergraduate degree or a Certificate in the teaching of ESL, with special attention to the needs of the Québec education system. A graduate program in Applied Linguistics is offered for experienced language educators.</p> <p>The Centre also provides a university-wide testing service for incoming students whose first language is not English, as well as comprehensive instruction for those seeking to improve their mastery of English for academic purposes.</p>	
Admission Requirements (BEd)	<p>BEd (Teaching English as a Second Language)</p> <p>The Centre for the Teaching of English as a Second Language offers the BEd Degree (Teaching English as a Second Language).</p> <p>General admission requirements are listed in §13 (Admission Regulations). Specific requirements are as follows:</p> <ol style="list-style-type: none"> 1. Satisfactory completion of a two-year pre-university program in a cégep or equivalent. Within the program, the students will be required to have successfully completed the equivalent of four semester courses in English. 2. Owing to the specialized nature of this program, no more than 60 pro-tanto credits will be permitted, and the University reserves the right to determine which ones these should be. (See §16.1.3.5) 3. Applicants must demonstrate competence in English and French through formal tests of proficiency and obtain scores acceptable to the TESL Centre. <i>NOTE I: Arrangements for taking the proficiency tests may be made through the Office of the Registrar.</i> 4. The BEd (TESL) is open to both prospective and experienced teachers and is offered in the day and evening. The internship courses are offered only as daytime, Fall/Winter courses. 	
	<p>120 BEd Specialization in Teaching English as a Second Language</p> <p>66 TESL 221³, 224³, 231³, 326³, 327³, 330³, 331³, 341³, 351³, 355³, 415³, 426³, 427³, 466³, 467³, 486⁶, 487⁶, 488³, and six credits chosen from TESL, LING.</p> <p>6 After testing, chosen from advanced ESL; intermediate/advanced FRAN; other languages (GERM, ITAL, PORT, RUSS, SPAN, etc.) at any level.</p>	<p>18 EDUC 210⁶, 445³, 450³, and six credits chosen from EDUC, ADED, PSYC.</p> <p>6 ENGL 212³ and 213³ or 396⁶</p> <p>6 Canadian English literature (three credits), Canadian English or other English literature (three credits)</p> <p>18 General university elective credits from any faculty.</p>

CERTIFICATE IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE: SEQUENCE I

This 30-credit program is offered to experienced teachers who are not native speakers of English.

Admission Requirements

1. Candidates must have an appropriate teacher's certificate or the equivalent of one year's experience as a full-time second-language teacher (400 hours).
2. Candidates must take a formal test of English proficiency and obtain a score acceptable to the TESL Centre.

NOTE: Arrangements for taking the proficiency test may be made through the Office of the Registrar.

Concordia students may transfer into the Certificate program all applicable Concordia credits earned in an incomplete degree or Certificate program or as an Independent student, provided they are students in good standing. Students from other institutions may transfer up to 12 applicable credits earned in an incomplete degree or Certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

The TESL Certificate: Sequence I program is offered in the evening and in the Summer Session, and may be offered outside Montréal through the Office for Off-Campus Education.

NOTE II: Individuals who have completed TESL Certificate: Sequence II are not eligible for admission to TESL Certificate: Sequence I.

Program

30 *Certificate in the Teaching of English as a Second Language: Sequence I Courses

TESL 201³, 203⁶, 205³, 324³, 341³, 413³, 415³, 424³, 433³

**Admission suspended for 2001-02.*

CERTIFICATE IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE: SEQUENCE II

This 30-credit program is offered to experienced teachers whose native language is English or whose proficiency in English meets native-user standards.

Admission Requirements

1. Applicants normally have an appropriate teacher's certificate or the equivalent of one year's experience as a full-time second-language teacher (400 hours).
2. Applicants must demonstrate competence in English and French through formal tests of proficiency and obtain scores acceptable to the TESL Centre.

NOTE I: Arrangements for taking the proficiency tests may be made through the Office of the Registrar.

Concordia students may transfer into the Certificate program all applicable Concordia credits earned in an incomplete degree or Certificate program or as an Independent student, provided they are students in good standing. Students from other institutions may transfer up to 12 applicable credits earned in an incomplete degree or Certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

The TESL Certificate: Sequence II program is offered in the day and evening.

NOTE II: Individuals who have completed a prior Concordia University TESL Certificate are not eligible for admission to this Certificate.

Program

30 Certificate in the Teaching of English as a Second Language: Sequence II

6 ENGL 212³ and 213³ or 396⁶

24 TESL 221³, 231³, 324³, 331³, 341³, 415³, 424³, 433³

INFORMATION RELEVANT TO PROGRAMS IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE

NOTE I: Upon successful completion of the BEd (TESL) program and after application to the Office of the Registrar, a graduate may be recommended to the Québec Teachers Certification Service for a "Brevet d'enseignement: autorisation personnelle permanente" (a teaching diploma). Graduates who wish to teach ESL in francophone schools, the only schools in Québec where ESL may be taught, must satisfy the French proficiency requirements of the school board to which they apply.

There is no comparable certification process for teaching ESL at the cégep level — Collège d'enseignement général et professionnel (junior college) or other adult level.

To be recommended for certification, students must achieve at least a "C" grade in methodology and teaching practice courses: that is, TESL 224³, 324³, 326³, 327³, 330³, 424³, 426³, 427³, 433³, 466³, 467³, 486⁶, and 487⁶.

Students who obtain a passing grade that is below the level required for recommendation for certification will be placed on conditional standing within the program and will be so informed in writing by the director of the TESL Centre. Students will be allowed to repeat the course(s) in question only once in order to achieve the required grade. (For the status of this grade as part of the student record, see Calendar §16.3.12.)

Students who obtain a failing grade (F, R, or NR) in any of the courses listed above as methodology and practice teaching will be required to withdraw from the program and will also be so informed in writing by the director of the TESL Centre.

In the event that a student meets regular university standards but does not satisfy the requirements for recommendation for certification, the student may apply to receive the university degree but will not be recommended to the Ministry.

NOTE II: Upon admission, students may be granted exemptions from courses in TESL programs if they have completed equivalent work at the university level.

Replacement for these exemptions must be made in accordance with the guidelines established by the TESL Centre and approved by the University. Copies of these guidelines may be obtained in the TESL Centre.

TESL Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

TESL 201 *Speech* (3 credits)

This course is open only to non-native speakers of English. The aim of the course is to prepare ESL teachers who are not native speakers of English to analyse pronunciation difficulties in terms of the major phonetic and phonemic features of English. Emphasis is placed on appropriate instruction for improving pronunciation.

NOTE: The only TESL programs towards which the course may be credited are the BEd (TESL) and TESL Certificate (Sequence I).

Students who have received credit for TESL 221 may not take this course for credit.

TESL 203 *Effective Communication* (6 credits)

This course is open only to students who are non-native speakers of English. The aim of the course is to raise the level of oral and written communication of ESL teachers who are non-native speakers of English.

NOTE: The only TESL program towards which the course may be credited is the TESL Certificate (Sequence I).

TESL 205 *Introduction to the Structure of English* (3 credits)

This course is open only to students who are non-native speakers of English. The structure of English is examined together with ways of using this knowledge for the effective teaching of English as a second language.

NOTE: The only TESL programs towards which the course may be credited are the BEd (TESL) and TESL Certificate (Sequence I).

Students who have received credit for TESL 231 may not take this course for credit.

TESL 221 *Phonology for Teachers* (3 credits)

Prerequisite: TESL 224, 231 concurrently. The aim of this course is to provide students with a knowledge of the major features of the English sound system, and to prepare them to apply this

knowledge in the language classroom. Contrasts and comparisons are made with French and other languages.

TESL 224 *Introduction to Teaching and Classroom Observation* (3 credits)

Prerequisite: TESL 221, 231 concurrently. The purpose of this course is to introduce students to the profession of teaching and to give them the opportunity to observe in Québec schools. Students focus on different aspects of pedagogy and administration during their 70 hours in the schools. Data gathered there are analysed in the on-campus portion of the course.

TESL 231 *Modern English Grammar* (3 credits)

Prerequisite: TESL 221, 224 concurrently. The purpose of this course is to provide students with a current description of the English grammatical system at the text level, to make them aware of grammatical differences between English and French and other major languages, and to alert them to typical grammatical errors made by non-native speakers of English.

TESL 298 *Selected Topics in TESL* (3 credits)

TESL 299 *Selected Topics in TESL* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

TESL 318 *Theories of Reading and Writing* (3 credits)

Prerequisite: Nine TESL credits including TESL 324. The course examines the theoretical and research basis for current practice in the teaching of reading and writing. Students become familiar with the concerns and practices of those

investigating the development of reading and writing in second-language learners in particular, and become aware of how this is related to teaching materials and activities.

TESL 324 Methodology I (3 credits)

Prerequisite: TESL 221; TESL 231 or TESL 201; TESL 205, each with a grade of "C" or better, and admission to a TESL program or permission of the Department. This course reviews current theory in applied linguistics which relates directly to teaching and learning ESL in the classroom. Techniques and methods appropriate to child, adolescent, and adult learners are discussed and demonstrated. In this course the emphasis is on classroom-oriented techniques and materials related to the teaching of listening and speaking. *NOTE: Students must have achieved at least a "C" in this course in order to be recommended for teacher certification upon completion of the program.*

TESL 326 Pedagogy: General (3 credits)

Prerequisite: TESL 224; TESL 327 concurrently; TESL 331, 341, EDUC 210, previously or concurrently. The purpose of this course is to give a history of TESL methods and to describe various teaching situations. Students examine current principles of TESL pedagogy. The course covers lesson planning, audio-visual aids, classroom organization, management techniques, and adapting published ESL materials to meet MEQ objectives.

TESL 327 Microteaching (3 credits)

Prerequisite: TESL 326 concurrently; TESL 331, 341, EDUC 210, previously or concurrently. The purpose of this course is to put into practice the pedagogical principles learned in TESL 326. Students team teach volunteer adult ESL learners from a local community centre under supervision for a minimum of 48 hours. Students learn how to receive and give feedback, and to engage in reflective dialogue about teaching.

TESL 330 Computers in Language Learning (3 credits)

Prerequisite: TESL 355, 426, 466 concurrently. The purpose of this course is to introduce students to the uses of the computer in the ESL class. Students acquire knowledge of computer applications for language learning and how to incorporate this knowledge into classroom practice.

TESL 331 Grammar for Teachers (3 credits)

Prerequisite: TESL 231. The purpose of this course is to provide students with current approaches, methods, and materials in the teaching of grammar at all levels of the ESL classroom. Students will be prepared to analyse critically and modify published classroom materials related to the teaching and learning of grammar.

TESL 341 Language Acquisition (3 credits)

Prerequisite: TESL 221, 231 previously or concurrently; or permission of the Department. This course examines sociocultural and psycholinguistic influences on the acquisition of a first and second language. These issues are examined in relation to the learning and teaching of a second language.

TESL 351 History of the English Language (3 credits)

Prerequisite: TESL 221, 231 or permission of the Department; TESL 415, 427, 467 concurrently. The purpose of this course is to provide students with an overview of the significant changes which have taken place in the English language from Proto-Indo-European to the present. Students consider the evolving nature of English and its role as an international language.

TESL 355 Multicultural and Multilevel Classes (3 credits)

Prerequisite: TESL 326 previously or concurrently. The purpose of this course is to prepare student teachers to provide sensitive and effective instruction to learners with different abilities and cultural backgrounds. Students assess the make-up of heterogeneous classes and select and identify appropriate teaching materials and strategies.

TESL 361 Teaching English for Specific Purposes (3 credits)

Prerequisite: TESL 324, or permission of the Department. This course provides instruction in the teaching of language skills to those who require English either as an auxiliary to their scientific, technical, or professional skills or as a medium for training in these areas.

TESL 385 Internship I (3 credits)

Prerequisite: TESL 324 and TESL 413 previously or concurrently. This course is offered as part of a cluster of daytime Fall-term courses which introduces the student teacher to the ESL classroom. Students observe experienced teachers, and have opportunities for micro-teaching, as well as some teaching to ESL students. Opportunities are provided for observation and practice with ESL learners at different ages and levels of proficiency in English.

NOTE: Students who have received credit for TESL 433 may not take this course for credit.
NOTE: Students must have achieved at least a "C" grade in this course in order to be recommended for teacher certification upon completion of the program.

NOTE: Students will complete the in-school portion of this course in a (M.E.Q.-approved) private or public Primary or Secondary school (where French is the language of instruction), in order to be recommended for teacher certification at these levels. Teaching practice completed with adults will not qualify students to be recommended for teacher certification.

TESL 398 *Selected Topics in TESL*
(3 credits)

TESL 399 *Selected Topics in TESL*
(6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

TESL 413 *Audio-Visual Aids* (3 credits)
Prerequisite: TESL 324 previously or concurrently. This course examines audio-visual resources and their effective use in second-language teaching. Students are given experience with the technical equipment generally available for use in second-language classrooms. In addition, students produce their own audio-visual materials.

TESL 415 *Testing, Evaluation and Course Design* (3 credits)
Prerequisite: TESL 351, 427, 467 concurrently. The purpose of this course is to prepare students to test and evaluate learners in different types of ESL programs. Students examine syllabi and evaluation systems used in the schools and become familiar with placement and proficiency testing materials.

TESL 424 *Methodology II* (3 credits)
Prerequisite: TESL 324. This course continues the presentation of techniques and methods begun in TESL 324. In this course the emphasis is on classroom-oriented techniques and materials related to the teaching of reading and writing.
NOTE: Students must have achieved at least a "C" in this course in order to be recommended for teacher certification upon completion of the program.

TESL 426 *Pedagogy: Primary* (3 credits)
Prerequisite: TESL 326; TESL 330, 355, 466 concurrently. The purpose of this course is to familiarize students with the principles of TESL pedagogy in regular and intensive ESL primary classrooms. This course emphasizes knowledge of MEQ primary-school programs and approved materials. Students learn classroom management techniques, assessment practices, and how to adapt materials to specific primary-school contexts.

TESL 427 *Pedagogy: Secondary*
(3 credits)
Prerequisite: TESL 426; TESL 351, 415, 467 concurrently. The purpose of this course is to familiarize students with the principles of TESL pedagogy in regular and Language Arts (ESL-LA) ESL secondary classrooms. This course emphasizes knowledge of MEQ secondary programs and approved materials. Students learn classroom management techniques, assessment practices, and how to adapt materials to specific secondary-school contexts.

TESL 433 *Practicum* (3 credits)
Prerequisite: TESL 324. This course is open only to students enrolled in the TESL Certificate

Sequence I or II. In this course, students practise techniques which were introduced in their methodology courses. There are opportunities for observation of ESL classes taught by experienced teachers. Techniques presented in TESL 324 and 424 are practised in micro-teaching, peer teaching, and sessions with groups of ESL students. Requirements include lesson planning and the evaluation of one's own teaching performance.

NOTE: Students must have achieved at least a "C" grade in this course in order to be recommended for teacher certification upon completion of the program.

NOTE: Students who have received credit for TESL 385 may not take this course for credit.

TESL 434 *Error Analysis* (3 credits)
Prerequisite: Fifteen TESL credits including TESL 324 and TESL 341. In this course, current theories of second-language acquisition are reviewed and applied. Each student carries out analyses of ESL learners' language, focusing on patterns of errors. The identification and classification of errors is followed by the development of teaching materials which the student uses in order to help learners overcome some persistent errors.

TESL 466 *Internship: Primary I* (3 credits)
Prerequisite: TESL 327; TESL 330, 355, 426 concurrently. The purpose of this course is to apply the principles acquired in TESL 426 to the teaching of ESL to primary-school learners. Students attend on-campus seminars and spend a minimum of 140 hours observing and teaching in a primary school supervised by a cooperating teacher and a university professor.

TESL 467 *Internship: Secondary I*
(3 credits)
Prerequisite: TESL 466; TESL 427 concurrently; EDUC 450 previously or concurrently. The purpose of this course is to apply the principles acquired in TESL 427 to the teaching of ESL to secondary-school learners. Students attend on-campus seminars and spend a minimum of 140 hours observing and teaching in a secondary school supervised by a cooperating teacher and a university professor.

TESL 485 *Internship II* (6 credits)
Prerequisite: TESL 385, or equivalent. This course provides supervised teaching in ESL classes, in addition to seminars and discussions on teaching techniques appropriate to different ages and levels of proficiency in English. Students take a daytime Winter-term section, together with a daytime section of TESL 424. Evening sections of these courses are open to experienced teachers who are currently teaching ESL.

NOTE: Students must have achieved at least a "C" grade in this course in order to be recommended for teacher certification upon completion of the program.

NOTE: Students will complete the in-school

portion of this course in a (M.E.Q.-approved) private or public Primary or Secondary school (where French is the language of instruction), in order to be recommended for Québec provincial teacher certification at these levels. Teaching practice completed with adults will not qualify students to be recommended for teacher certification.

NOTE: Students who completed TESL 385 in a Primary school will change to a Secondary school in this course. Those who taught in a Secondary school will change to a Primary school.

TESL 486 Internship: Primary II (6 credits)

Prerequisite: TESL 466; TESL 487, 488 concurrently. The purpose of this course is to further develop the skills required in teaching ESL to primary-school learners. Students teach a minimum of 210 hours supervised by a cooperating teacher and a university professor. In addition, students attend on-campus seminars in which they discuss and reflect upon their experiences in the schools.

TESL 487 Internship: Secondary II (6 credits)

Prerequisite: TESL 467; TESL 486, 488 concurrently. The purpose of this course is to further develop the skills required in teaching ESL to secondary-school learners. Students teach a minimum of 210 hours supervised by a cooperating teacher and a university professor. In addition, students attend on-campus seminars in which they discuss and reflect upon their experiences in the schools.

TESL 488 Internship Seminar (3 credits)

Prerequisite: TESL 486, 487 concurrently. The purpose of this course is to integrate the knowledge gained during the BEd with the knowledge that students have acquired during practice in the field. Students reflect on and make explicit their own professional and personal development over the course of the four-year program and set goals for future long-term professional development.

TESL 491 Study in a Special Subject (3 credits)

Prerequisite: Permission of the Department. This course provides an opportunity for advanced students to intensify their study beyond the area of specialization already represented by the curriculum. The selected subject varies with the special interest of the instructor conducting the course in any given year.

TESL 492 Study in a Special Subject (3 credits)

Prerequisite: Permission of the Department. A student repeating TESL 491 registers for credits under TESL 492.

TESL 498 Advanced Topics in TESL (3 credits)

TESL 499 Advanced Topics in TESL (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ESL Courses

COURSES IN ENGLISH AS A SECOND LANGUAGE

Courses in English as a Second Language are designed for students who are not native speakers of English and who need further training in the effective use of English in the university setting. Students must be tested for placement in ESL 207, 208, 209, or 210. Information about placement testing schedules may be obtained from the English Language Proficiency Testing Office, TESL Centre, 2070 Mackay, Room: 200, (514) 848-2453. A special examination fee is charged. (See §15.1)

Written work is required in English for these courses; please consult with the Department.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

NOTE: Students enrolled in a regular degree or an extended credit degree program in the Faculty of Arts and Science may take ESL courses for degree credit, up to a maximum of six credits.

ESL 207 English Language — Intermediate I (3 credits)

Prerequisite: Placement by the Concordia English Language Diagnostic Test. A course for students who are not native speakers of English and who need further training in the effective use of English in the university setting. Emphasis is on reading and writing skills.

NOTE: Students who have completed ESL 100 or have received credit for ENGL 205 or 206 may not take this course for credit.

ESL 208 English Language — Intermediate II (3 credits)

Prerequisite: ESL 207, or placement by the Concordia English Language Diagnostic Test. This course is a continuation of ESL 207. *NOTE: Students who have completed ESL 100 or have received credit for ENGL 205 or 206 may not take this course for credit.*

ESL 209 English Language — Advanced I (3 credits)

Prerequisite: ESL 208, or placement by the

Concordia English Language Diagnostic Test. This course is for students who are not native speakers of English. It encourages the development of effective written communication and improved reading comprehension, so that students may perform competently in their other university work.

NOTE: Students who have received credit for ESL 201 or ENGL 205 or 206 may not take this course for credit.

**ESL 210 *English Language —
Advanced II* (3 credits)**

Prerequisite: ESL 209, or placement by the Concordia English Language Diagnostic Test. This course is a continuation of ESL 209. Emphasis is upon writing the academic research paper.

NOTE: Students who have received credit for ESL 201 or ENGL 205 or 206 may not take this course for credit.

**ESL 290 *Communication through the
Study of Special Topics*
(3 credits)**

Prerequisite: Successful completion of ESL 201; ESL 209, or tested equivalence. This course is for non-native speakers of English only. Its primary aim is to increase students' oral fluency in English; its secondary aim is to encourage improved levels of competence in the other language skills: listening, reading, and writing.

**ESL 298 *Selected Topics in ESL*
(3 credits)**

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.330

THEOLOGICAL STUDIES

Faculty	Chair and Graduate Program Director PAMELA BRIGHT, Associate Professor	Limited Time Appointments • Ethics • Pastoral Ministry																						
	Associate Professor CHRISTOPHE POTWOROWSKI	Adjunct Professor CHARLES KANNENGIESSER																						
Location	Loyola Campus Hingston Hall B, Room: HB 306 (514) 848-2475																							
Department Objectives	Theology builds a bridge between religious experience and human society. To expand understanding of the human person and of God, the Department seeks to make accessible to all its students an immense tradition of knowledge — especially through interpretation theory, historical analysis, psychological insight, and theoretical elaboration. Within the spectrum of world religions, it focuses on the Christian experience, and the Roman Catholic tradition in particular. The Department is dedicated to training professional theologians and researchers while expanding the horizons of those who wish to appreciate their heritage.																							
Programs	<p>Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value. Students must have their programs approved by the Department. Students will be admitted to the Certificate in Pastoral Ministry with the permission of the Department. Admission will be based on number of available places and upon evaluation of a candidate's letter of intent and an interview dealing with their educational background and community experience. All courses in the Department are open to any qualified student of Concordia.</p> <table><tr><td>36 BA Major in Theological Studies</td><td>24 Minor in Theological Studies</td></tr><tr><td>12 THEO 201³, 202³, 203³, 204³</td><td>12 THEO 201³, 202³, 203³, 204³</td></tr><tr><td>3 Chosen from THEO 301³, 303³</td><td>12 Chosen from other Theology offerings</td></tr><tr><td>3 Chosen from THEO 315³, 317³</td><td></td></tr><tr><td>3 Chosen from THEO 206³, 320³, 322³</td><td>30 Certificate in Pastoral Ministry</td></tr><tr><td>3 Chosen from THEO 331³, 333³, 335³, 337³</td><td>15 THEO 203³, 402³, 404³; AHSC 230³, 232³</td></tr><tr><td>3 Chosen from THEO 351³, 353³</td><td>3 Chosen from THEO 233³, 315³, 317³</td></tr><tr><td>3 Chosen from THEO 208³, 234³, 236³, 340³</td><td>3 Chosen from THEO 206³, 320³, 322³</td></tr><tr><td>6 Chosen from any of the Theology offerings</td><td>3 Chosen from THEO 204³, 351³, 353³</td></tr><tr><td></td><td>3 Chosen from THEO 331³, 333³, 335³, 337³</td></tr><tr><td></td><td>3 Chosen from THEO 234³, 236³, 340³</td></tr></table> <p>With the permission of the Department, three credits in a cognate discipline may be substituted for a Theology elective.</p>		36 BA Major in Theological Studies	24 Minor in Theological Studies	12 THEO 201 ³ , 202 ³ , 203 ³ , 204 ³	12 THEO 201 ³ , 202 ³ , 203 ³ , 204 ³	3 Chosen from THEO 301 ³ , 303 ³	12 Chosen from other Theology offerings	3 Chosen from THEO 315 ³ , 317 ³		3 Chosen from THEO 206 ³ , 320 ³ , 322 ³	30 Certificate in Pastoral Ministry	3 Chosen from THEO 331 ³ , 333 ³ , 335 ³ , 337 ³	15 THEO 203 ³ , 402 ³ , 404 ³ ; AHSC 230 ³ , 232 ³	3 Chosen from THEO 351 ³ , 353 ³	3 Chosen from THEO 233 ³ , 315 ³ , 317 ³	3 Chosen from THEO 208 ³ , 234 ³ , 236 ³ , 340 ³	3 Chosen from THEO 206 ³ , 320 ³ , 322 ³	6 Chosen from any of the Theology offerings	3 Chosen from THEO 204 ³ , 351 ³ , 353 ³		3 Chosen from THEO 331 ³ , 333 ³ , 335 ³ , 337 ³		3 Chosen from THEO 234 ³ , 236 ³ , 340 ³
36 BA Major in Theological Studies	24 Minor in Theological Studies																							
12 THEO 201 ³ , 202 ³ , 203 ³ , 204 ³	12 THEO 201 ³ , 202 ³ , 203 ³ , 204 ³																							
3 Chosen from THEO 301 ³ , 303 ³	12 Chosen from other Theology offerings																							
3 Chosen from THEO 315 ³ , 317 ³																								
3 Chosen from THEO 206 ³ , 320 ³ , 322 ³	30 Certificate in Pastoral Ministry																							
3 Chosen from THEO 331 ³ , 333 ³ , 335 ³ , 337 ³	15 THEO 203 ³ , 402 ³ , 404 ³ ; AHSC 230 ³ , 232 ³																							
3 Chosen from THEO 351 ³ , 353 ³	3 Chosen from THEO 233 ³ , 315 ³ , 317 ³																							
3 Chosen from THEO 208 ³ , 234 ³ , 236 ³ , 340 ³	3 Chosen from THEO 206 ³ , 320 ³ , 322 ³																							
6 Chosen from any of the Theology offerings	3 Chosen from THEO 204 ³ , 351 ³ , 353 ³																							
	3 Chosen from THEO 331 ³ , 333 ³ , 335 ³ , 337 ³																							
	3 Chosen from THEO 234 ³ , 236 ³ , 340 ³																							
Courses	<p>Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.</p> <table><tr><td>THEO 201 Introduction to Theological Studies (3 credits) The course introduces the student to the structure, nature, and method of theological studies and the relation of these studies to the other sciences.</td><td>the Bible, from Genesis to Revelation, and a practical introduction to the skills required to understand biblical texts. Attention is paid to diverse approaches to interpretation which are used in historical, literary, or theological study of the Bible, and also to appropriate strategies for the use of biblical texts in liturgy, homilies, and personal prayer. <i>NOTE: Students who have received credit for THEO 222 may not take this course for credit.</i></td></tr><tr><td>THEO 202 Introduction to Biblical Studies (3 credits) This course provides a survey of the contents of</td><td></td></tr></table>		THEO 201 Introduction to Theological Studies (3 credits) The course introduces the student to the structure, nature, and method of theological studies and the relation of these studies to the other sciences.	the Bible, from Genesis to Revelation, and a practical introduction to the skills required to understand biblical texts. Attention is paid to diverse approaches to interpretation which are used in historical, literary, or theological study of the Bible, and also to appropriate strategies for the use of biblical texts in liturgy, homilies, and personal prayer. <i>NOTE: Students who have received credit for THEO 222 may not take this course for credit.</i>	THEO 202 Introduction to Biblical Studies (3 credits) This course provides a survey of the contents of																			
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THEO 202 Introduction to Biblical Studies (3 credits) This course provides a survey of the contents of																								

THEO 203 *Introduction to New Testament*
(3 credits)

This course studies the four major kinds of writing found in the New Testament: Gospel, Letter, Apocalypse, Luke-Acts.

NOTE: Students who have received credit for THEO 310 may not take this course for credit.

THEO 204 *Introduction to Christian Ethics* (3 credits)

This course is an introduction to the field of ethics in the context of Christian faith. Christian ethics is presented as an active quest towards understanding and guiding Christian moral living. There is a brief presentation of the historical background to Christian ethics, an exploration of the points of convergence with other religious traditions, as well as the interrelationship between morality and freedom. The course will include a reflection on the problem of evil as a diminishment of persons and societies as well as a section on moral development and moral maturity.

NOTE: Students who have received credit for THEO 350 may not take this course for credit.

NOTE: This course and THEO 211 meet the Comité Catholique theology requirements for those intending to teach religion in Québec Catholic primary schools.

THEO 206 *The Origins of Christianity*
(3 credits)

A study of the historical origins of the Church with a view to understanding the creative originality of the Christian tradition. This study opens up possibilities for the rethinking of contemporary Christianity in the light of the common sources of diverse Christian tradition.

NOTE: Students who have received credit for THEO 421 may not take this course for credit.

THEO 208 *Celtic Christianity* (3 credits)

This course follows a historical line to show the connections of the pre-Christian Celtic beliefs with the early Christian Church of Celtic countries. While some emphasis is on history and culture, particular focus is placed on the spirituality of the Celtic people. While not limited to the Irish experience, the experience of the early Irish Celtic Church serves as a focal point in considering various patterns of human living as indicative of a particular spiritual vision.

NOTE: Students who have received credit for this topic under a THEO 298 number may not take this course for credit.

THEO 211 *Introduction to Roman Catholicism* (3 credits)

This course offers an introduction to the contemporary Roman Catholic experience, and includes a treatment of the historical origins of Catholicism, its worship and liturgy, its spirituality, and its role in society and culture.

NOTE: This course and THEO 204 meet the Comité Catholique theology requirements for those intending to teach religion in Québec Catholic primary schools.

THEO 212 *Faith, Reason and the Religious Sense* (3 credits)

This course investigates the basic human search for meaning in life using as a starting point the role of reason as openness to reality. This openness expresses itself as a fundamental desire for truth, goodness, and beauty. The course explores how these desires are constitutive of human existence, how various unreasonable strategies are used to distort and deny them, and how a reasonable affirmation of them is possible.

NOTE: Students who have received credit for this topic under a THEO 298 number may not take this course for credit.

THEO 226 *Theology and Myth* (3 credits)

This course is a comparative study of mythology. The focus is on the role of myths in Christian theology, e.g. creation myths, origins of humanity, salvation myths, and others.

THEO 233 *Religious Pluralism in a Secular Culture* (3 credits)

The course focuses on the relationship between religion, pluralism, and secular culture. It deals specifically with the prevalence of pluralism in a society that has neither done away with, nor marginalized, religion. In the context of respect for human rights and freedom of conscience, a new kind of religious identity is emerging which is sensitive to context, procedure, and history. The course considers ways in which this new identity be communicated so that a community is constituted and not divided.

NOTE: Students who have received credit for THEO 232 may not take this course for credit.

THEO 234 *Christian Spirituality* (3 credits)

The characteristics of Christian spirituality, its roots in scripture, the balance between contemplation and action, its communal dimension, its attitude to world, are analysed through the study of a selection of men and women whose lives exemplify various aspects of Christian spirituality over the past two thousand years. The course examines notions of transcendence and immanence, individuality and collectivity, nature and the divine.

NOTE: Students who have received credit for THEO 372 may not take this course for credit.

THEO 236 *Spirituality: Personal, Social and Religious Dimensions*
(3 credits)

The course focuses on spirituality as a personal response to the human quest for transcendence. There is also an analysis of the ways in which spirituality creates a consensus for a social harmony and for creative exchanges between cultures, especially in the arts. The course includes a general reflection on the role of religion in fostering spirituality by marking it with explicit convictions about the ultimate goal of life, and also includes a specific section on the characteristics of Christian spirituality as a response to the Gospel.

THEO 238 *Theology in Film* (3 credits)
This course examines a series of films to uncover their theological preoccupations, motives, and questions. Methods of analyses are discussed, in conjunction with screenings of selected films.

THEO 242 *Theology and the Arts*
(3 credits)
This course is a theological reflection on various art forms (music, dance, visual arts, architecture) throughout the history of Christianity.
NOTE: Students who have received credit for THEO 241 may not take this course for credit.

THEO 271 *Women in Theology* (3 credits)
This course explores the emergence of a body of scholarly writing by women theologians. It looks at the questions raised and the critiques of traditional theological doctrines and interpretations, as well as suggesting different hermeneutical approaches to exegesis, theology, and history.

THEO 276 *The Icon: Theology in Colour*
(3 credits)
The icon is both a theological medium and a theological message. The first is expressed by design, the latter by colour. The study of the icon offers the student an opportunity to explore theological meaning by means of image and symbolism as well as concept and reasoning.

THEO 298 *Selected Topics in Theological Studies* (3 credits)

THEO 299 *Selected Topics in Theological Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

THEO 301 *The Hebrew Bible: History and Texts* (3 credits)
An introduction to the historical contexts in which the Hebrew Bible was written, to its various literary genres (historical, prophetic, and poetic), and to contemporary methods of interpretation.

THEO 303 *The Old Testament in Theology* (3 credits)
Selected texts from the Bible will be read in the light of contemporary scholarship, with attention to the use of these texts in theology, in worship, and in private prayer. The course focuses on the uses of the Bible, offering a critique of abuses in the past and present.
NOTE: Students who have received credit for THEO 300 may not take this course for credit.

THEO 315 *Gospels and Acts* (3 credits)
This course is an introduction to the texts and teachings of the four canonical Gospels and to the Acts of the Apostles.

THEO 317 *The Epistles and Revelation*
(3 credits)
This course is an introduction to the New

Testament Epistles, and to the Book of Revelation, with a closer reading of selected texts.

THEO 320 *History of Christianity: First Millennium* (3 credits)
This course explores the historical foundations of the Church in the first five centuries, and the diverging experiences of the Church in East and West to the end of the millennium.
NOTE: Students who have received credit for THEO 423 may not take this course for credit.

THEO 322 *History of Christianity: Reformation and Modernity*
(3 credits)
This course explores the history of Christianity from the high Middle Ages through to the closing decades of the twentieth century, with special attention given to the ages of Reform and to the impact of the Enlightenment on the lifestyles, institutions, social attitudes, and intellectual life of modern Christians.
NOTE: Students who have received credit for THEO 425 may not take this course for credit.

THEO 331 *The Christian Understanding of God* (3 credits)
This course is the exploration of God as ultimate reality in Christian history, and in the context of contemporary issues such as world religions, gender, and new forms of language about God.
NOTE: Students who have received credit for THEO 430 may not take this course for credit.

THEO 333 *Jesus Christ in History and Faith* (3 credits)
This course studies the biblical and later traditions about the person of Jesus Christ, both from a historical and doctrinal perspective. The course, traditionally known as christology, also examines the central role of Christ in contemporary theology.
NOTE: Students who have received credit for THEO 332 may not take this course for credit.

THEO 335 *The Church in the World*
(3 credits)
This course reflects on the nature of the Church as People of God situated in the modern world. Topics to be explored are the notions of belonging, freedom and authority, church and society.
NOTE: Students who have received credit for THEO 334 may not take this course for credit.

THEO 337 *The Christian Mysteries*
(3 credits)
This course examines the history, the symbols, and the images of ritual and liturgical communication in Christianity, especially in baptism and eucharist. These "mysteries", as the Christian sacraments were originally called, will be studied in the context of a Christian life.
NOTE: Students who have received credit for THEO 336 may not take this course for credit.

THEO 340 *Private Prayer and Public Worship* (3 credits)

Prayer is shown as a basic human act. The course will explore diverse traditions of the communal forms of worship as well as the many forms of private prayer that have been practised in Christian churches.

NOTE: Students who have received credit for THEO 370 may not take this course for credit.

THEO 351 *Applied Ethical Issues* (3 credits)

This course explores controversial issues in areas of personal ethics (such as euthanasia, abortion, human sexuality, health care, aging), and social ethics such as social justice and economic issues, war and peace.

NOTE: Students who have received credit for THEO 390 may not take this course for credit.

THEO 353 *Clinical Ethics* (3 credits)

This course explores some of the more common problems in health-care ethics. The course makes a distinction between clinical ethics and medical ethics, in the sense that these topics will be discussed from within a multidisciplinary perspective.

THEO 398 *Selected Topics in Theological Studies* (3 credits)

THEO 399 *Selected Topics in Theological Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: All 400-level Theology courses have as their prerequisite an appropriate 300-level Theology course, or its equivalent, with permission of the Department.

THEO 402 *Pastoral Ministry* (3 credits)

The course introduces the student to the history and theology of pastoral ministry.

THEO 404 *Practicum in Pastoral Ministry* (3 credits)

Prerequisite: THEO 402 and permission of the Department. This course complements THEO 402 as the internship and field exploration of a particular pastoral ministry. It will be supervised by experts or experienced individuals in the various fields of ministry, e.g. eldercare, bereavement, hospital, school, youth ministries, and others.

THEO 497 *Selected Topics in Theological Studies* (3 credits)

THEO 498 *Selected Topics in Theological Studies* (3 credits)

THEO 499 *Advanced Topics in Theological Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.340

URBAN STUDIES

Faculty	Director JOHN ZACHARIAS, Associate Professor								
Location	Sir George Williams Campus J.W. McConnell Building, Room: LB 641 (514) 848-2050								
Department Objectives	Urban Studies is a multidisciplinary program, designed to introduce the student to the processes of planned change in urban environments. Urban Studies provides a core of urban-planning courses involving field studies, planning projects, and the acquisition of technical skills. Complementary courses in Sociology, Political Science, Economics, and Geography provide the necessary approaches and understanding in order to consider complex urban development. The program is designed for students planning to undertake a post-graduate degree in planning or a related field and also provides required training for work in the planning, real estate, and social service fields.								
Programs	<p>Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value. Students should consult with the Director prior to registering for Urban Studies courses. Students exempted from any required courses must replace them with others that are relevant to the program and approved by the Director. Similarly, all substitutions must be approved by the Director.</p> <p>For the following programs URBS 230³ and URBS 240³ may serve as prerequisites for courses in Anthropology and Sociology.</p> <table><tr><td>66 BA Honours in Urban Studies <i>Stage I</i> 12 URBS 230³, 240³, 250³, 260³ 3 GEOG 220³ <i>Stage II</i> 9 URBS 333⁶, 370³ 6 GEOG 330³, 333³ 3 ECON 392³ 6 Chosen from ANTH 355³; ARTH 374³; HIST 369³; POLI 349³, 352³; SOCI 315⁶, 353³ <i>Stage III</i> 24 URBS 433⁶, 438³, 480³, 486³, 487³, 491⁶ 3 Chosen from GEOG 430³; SOCI 450³; or other 400-level course</td><td><i>Stage III</i> 21 URBS 433⁶, 438³, 480³, 483³, 486³, 487³ 3 Chosen from GEOG 430³; SOCI 450³; or other 400-level course</td></tr><tr><td>63 BA Specialization in Urban Studies <i>Stage I</i> 12 URBS 230³, 240³, 250³, 260³ 3 GEOG 220³ <i>Stage II</i> 9 URBS 333⁶, 370³ 6 GEOG 330³, 333³ 3 ECON 392³ 6 Chosen from ANTH 355³; ARTH 374³; HIST 369³; POLI 349³, 352³; SOCI 315⁶, 353³</td><td>42 BA Major in Urban Studies <i>Stage I</i> 12 URBS 230³, 240³, 250³, 260³ 3 GEOG 220³ <i>Stage II</i> 9 URBS 333⁶, 370³ 3 ECON 392³ 3 Chosen from ANTH 355³; ARTH 374³; GEOG 330³, 333³; HIST 369³; POLI 349³, 352³; SOCI 353³ <i>Stage III</i> 6 URBS 433⁶ 3 400-level URBS course 3 Chosen from GEOG 430³; SOCI 450³; or other 400-level course</td></tr><tr><td></td><td>30 Minor in Urban Studies* 6 URBS 230³, 240³ 24 Chosen from URBS 250³, 260³, 333⁶, 370³, 433⁶, 438³, 480³, 486³, 487³; GEOG 220³, 330³, 333³</td><td></td></tr></table> <p><i>*Admission suspended for 2001-02.</i></p>		66 BA Honours in Urban Studies <i>Stage I</i> 12 URBS 230 ³ , 240 ³ , 250 ³ , 260 ³ 3 GEOG 220 ³ <i>Stage II</i> 9 URBS 333 ⁶ , 370 ³ 6 GEOG 330 ³ , 333 ³ 3 ECON 392 ³ 6 Chosen from ANTH 355 ³ ; ARTH 374 ³ ; HIST 369 ³ ; POLI 349 ³ , 352 ³ ; SOCI 315 ⁶ , 353 ³ <i>Stage III</i> 24 URBS 433 ⁶ , 438 ³ , 480 ³ , 486 ³ , 487 ³ , 491 ⁶ 3 Chosen from GEOG 430 ³ ; SOCI 450 ³ ; or other 400-level course	<i>Stage III</i> 21 URBS 433 ⁶ , 438 ³ , 480 ³ , 483 ³ , 486 ³ , 487 ³ 3 Chosen from GEOG 430 ³ ; SOCI 450 ³ ; or other 400-level course	63 BA Specialization in Urban Studies <i>Stage I</i> 12 URBS 230 ³ , 240 ³ , 250 ³ , 260 ³ 3 GEOG 220 ³ <i>Stage II</i> 9 URBS 333 ⁶ , 370 ³ 6 GEOG 330 ³ , 333 ³ 3 ECON 392 ³ 6 Chosen from ANTH 355 ³ ; ARTH 374 ³ ; HIST 369 ³ ; POLI 349 ³ , 352 ³ ; SOCI 315 ⁶ , 353 ³	42 BA Major in Urban Studies <i>Stage I</i> 12 URBS 230 ³ , 240 ³ , 250 ³ , 260 ³ 3 GEOG 220 ³ <i>Stage II</i> 9 URBS 333 ⁶ , 370 ³ 3 ECON 392 ³ 3 Chosen from ANTH 355 ³ ; ARTH 374 ³ ; GEOG 330 ³ , 333 ³ ; HIST 369 ³ ; POLI 349 ³ , 352 ³ ; SOCI 353 ³ <i>Stage III</i> 6 URBS 433 ⁶ 3 400-level URBS course 3 Chosen from GEOG 430 ³ ; SOCI 450 ³ ; or other 400-level course		30 Minor in Urban Studies* 6 URBS 230 ³ , 240 ³ 24 Chosen from URBS 250 ³ , 260 ³ , 333 ⁶ , 370 ³ , 433 ⁶ , 438 ³ , 480 ³ , 486 ³ , 487 ³ ; GEOG 220 ³ , 330 ³ , 333 ³	
66 BA Honours in Urban Studies <i>Stage I</i> 12 URBS 230 ³ , 240 ³ , 250 ³ , 260 ³ 3 GEOG 220 ³ <i>Stage II</i> 9 URBS 333 ⁶ , 370 ³ 6 GEOG 330 ³ , 333 ³ 3 ECON 392 ³ 6 Chosen from ANTH 355 ³ ; ARTH 374 ³ ; HIST 369 ³ ; POLI 349 ³ , 352 ³ ; SOCI 315 ⁶ , 353 ³ <i>Stage III</i> 24 URBS 433 ⁶ , 438 ³ , 480 ³ , 486 ³ , 487 ³ , 491 ⁶ 3 Chosen from GEOG 430 ³ ; SOCI 450 ³ ; or other 400-level course	<i>Stage III</i> 21 URBS 433 ⁶ , 438 ³ , 480 ³ , 483 ³ , 486 ³ , 487 ³ 3 Chosen from GEOG 430 ³ ; SOCI 450 ³ ; or other 400-level course								
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	30 Minor in Urban Studies* 6 URBS 230 ³ , 240 ³ 24 Chosen from URBS 250 ³ , 260 ³ , 333 ⁶ , 370 ³ , 433 ⁶ , 438 ³ , 480 ³ , 486 ³ , 487 ³ ; GEOG 220 ³ , 330 ³ , 333 ³								

students to develop critical thinking skills about the metropolitan world in which they live.

URBS 230 *Urban Development* (3 credits)

This course examines how and why cities grow and change over time. The relationships between socio-cultural, economic, and physical aspects of urban development are considered at the local, city, and regional scales.

NOTE: Students who have received credit for URBS 280 may not take this course for credit.

URBS 240 *Planning* (3 credits)

This course considers the important role planning will have in shaping the world of tomorrow. The methods of planning used in public, parapublic, and private spheres of activity are introduced. The process for implementation of plans and the role of the planning professional are given special emphasis.

NOTE: Students who have received credit for URBS 280 may not take this course for credit.

URBS 250 *Representation Methods in Urban Studies* (3 credits)

This is an introduction to the analytical and practical skills associated with urban field studies. The emphasis is on the use of graphic media for the representation of the social, economic, cultural, and built environments.

NOTE: Students who have received credit for URBS 290 or for this topic under a GEOG 299 number may not take this course for credit.

URBS 260 *Analytical Methods in Urban Studies* (3 credits)

This is an introduction to the analytical and practical skills associated with urban field studies. The emphasis is on the use of data sources and collection techniques along with analytical procedures appropriate to questions of urban planning and public policy.

NOTE: Students who have received credit for URBS 290 or for this topic under a GEOG 299 number may not take this course for credit.

URBS 333 *Urban Laboratory* (6 credits)

Prerequisite: URBS 250, 260. In this course, an urban problem is studied and solutions simulated. The emphasis is on first-hand knowledge of an area-based problem. Theory and case studies are used to develop appropriate interventions. Plans are prepared and evaluated.

NOTE: Students who have received credit for URBS 334 or for this topic under a GEOG 399 number may not take this course for credit.

URBS 370 *Urban Systems* (3 credits)

Prerequisite: URBS 230, 240; or second-year standing in a Geography or Engineering program. The infrastructure of the city is considered from a systems standpoint. The provision of urban services by public and private providers is examined with respect to urban space. Systems encompass institutional,

transportation, and underground networks. This course is primarily concerned with the design and management of networks.

URBS 398 *Selected Topics in Urban Studies* (3 credits)

Special topics in urban studies.

URBS 433 *Advanced Urban Laboratory* (6 credits)

Prerequisite: URBS 333. This is an advanced course in urban design. An overview of current theory and practice is presented. An urban problem is developed and appropriate interventions are considered. These interventions are simulated and the results assessed.

URBS 438 *Urban Ecology* (3 credits)

Prerequisite: GEOG 220, 330; URBS 230; or permission of the Department. The city is viewed as an interdependent and interactive system. The issues surrounding ecological, economic, and socio-cultural sustainability are examined in the context of the development of public policy. The integration of a spectrum of ecological approaches and standards is a major theme in individual research projects undertaken in the context of this course.

NOTE: Students who have received credit for URBS 488 or GEOG 438 may not take this course for credit.

URBS 480 *Impact Assessment* (3 credits)

Prerequisite: URBS 370. The impacts of projects on urban and suburban communities and the environment are studied within the context of environmental protection legislation. The methods of assessment are then applied to specific cases.

URBS 483 *Directed Studies/Practicum in Urban Planning I* (3 credits)

Prerequisite: Completion of 60 credits; enrolment in the Specialization in Urban Studies. Through a case study or practicum of 120 hours with a private or public institution, or community interest group, students acquire experience in a professional working environment.

URBS 484 *Directed Studies/Practicum in Urban Planning II* (3 credits)

Prerequisite: Completion of 60 credits; enrolment in the Specialization in Urban Studies. Through a case study or practicum of 120 hours with a private or public institution, or community interest group, students acquire experience in a professional working environment.

URBS 486 *Behaviour and the Environment* (3 credits)

Prerequisite: GEOG 330; URBS 230. Human behaviour is seen both as a determinant and as an outcome of environment. Behavioural topics include perception and attitudes, spatial behaviour, spatial cognition, and time-path analysis. Student projects involve applying the theory to a location study, a facility management study, or other relevant application.

URBS 487 *The Computer and Urban Planning* (3 credits)

Prerequisite: URBS 333. Students solve a micro-scale urban-planning problem while they learn a computer-aided design program. Tutorials in the computer lab are followed by individual project development.

URBS 491 *Honours Thesis or Project* (6 credits)

Prerequisite: Completion of 60 credits; enrolment in the Honours in Urban Studies. Students may

undertake independent, supervised research leading to the production of an Honours thesis. They may also undertake a major urban study leading to recommendations for public or private interventions.

NOTE: Students who have received credit for GEOG 491 may not take this course for credit.

URBS 498 *Advanced Topics in Urban Studies* (3 credits)

Special topics in urban studies.

31.400 **COMPUTER SCIENCE**

The Department of Computer Science offers a Minor in Computer Science available to students in the Faculty of Arts and Science. For further details on this program, see §71.70.5.

31.500 **COLLEGES, INSTITUTES AND SCHOOLS**

The Faculty of Arts and Science is the largest Faculty in the University. In order to combat the depersonalization so often found in a large faculty, the Faculty of Arts and Science has created smaller, more manageable units offering a personalized approach to education. At present, there are five such units in existence: Liberal Arts College, Lonergan University College, School of Community and Public Affairs, Science College, and Simone de Beauvoir Institute. Each unit is composed of a group of students and fellows who are united by a particular philosophy of education.

Each unit operates in much the same fashion. Normally a student admitted to the University will enrol in a specific department-based program — a Major, Specialization, or Honours. Students in the Liberal Arts College may, however, elect to enrol in the College Major in Western Society and Culture instead of in a departmental program. Similarly, students in the Simone de Beauvoir Institute may enrol in a Major program in Women's Studies. Students attracted by the particular educational opportunities offered by one of the units will apply to the unit in question. Once admitted to the College, Institute, or School of their choice, students may benefit from the academic curriculum, the extra-curricular activities, and social and intellectual environment provided in each of these units. It is the goal of these units to assist students to broaden their specialized disciplinary education with carefully chosen electives, with specially designed tutorials, and with career-oriented advising, all set in a more personal and friendly "university college" environment.

Each unit has a physical location of its own, where its students may gather to exchange ideas, whether in the classroom or in one of the lounges provided for such interaction. As well, there is a library of basic books and periodical literature. From time to time, there will be planned activities, special-interest seminars, and stimulating lectures by invited guest speakers.

Each unit has a group of faculty members from within the University assigned as fellows or tutors, whose major function will be to act as student advisers. Together, students and fellows or tutors plan a carefully integrated undergraduate program based on the philosophy of education promoted.

The advantage of this approach to education is that students may utilize the resources of a large Arts and Science Faculty, yet still enjoy the effective interchange of ideas that only a small unit can provide.

31.515 **CO-OPERATIVE EDUCATION**

Through the Institute for Co-operative Education, the University offers programs in the co-operative format in the Departments of Chemistry and Biochemistry, Economics, Études françaises, Mathematics and Statistics, and Physics in the Faculty of Arts and Science; in the School for Building and the Departments of Computer Science, Electrical and Computer Engineering, and Mechanical Engineering in the Faculty of Engineering and Computer Science; and in the Departments of Accountancy, Decision Sciences and Management Information Systems and Marketing in the Faculty of Commerce and Administration.

Co-operative programs in the Faculty of Arts and Science are open to students who are enrolled in many of the Honours and Specialization programs offered by the above Departments.

As it becomes feasible the University may consider offering other disciplines in the co-op format. (Please see §24 of this Calendar.)

Principal and Permanent Fellow
HARVEY SHULMAN, *Professor, Political Science*

Permanent Fellows
GEOFFREY C. FIDLER, *Associate Professor, Education*
FREDERICK H. KRANTZ, *Associate Professor, History*

Full-Time Fellows
ERIC BUZZETTI, *Assistant Professor, Liberal Arts College*
ARIELA FREEDMAN, *Assistant Professor, Liberal Arts College*

Non-Teaching Fellows
PAMELA BRIGHT, *Associate Professor, Theological Studies*
MICHAEL BROSS, *Associate Professor, Psychology*
ANDRÉ FURLANI, *Assistant Professor, English*
BENOÎT LÉGER, *Assistant Professor, Études françaises*
IRA ROBINSON, *Professor, Religion*
FRANZISKA SHLOSSER, *Associate Professor, History*

Location

Sir George Williams Campus
Annex RR, Room: 103
(514) 848-2565

Objectives

The Liberal Arts College, a small community of fellows and students, provides a unique liberal arts emphasis within the Faculty of Arts and Science. Built on a core of eight courses, the multidisciplinary curriculum is designed to guide students in exploring the foundations and development of Western civilization and culture. The aim is to foster the major values of the Western tradition—those of critical thinking and respect for intellectual freedom.

The major goal of Liberal Arts College is to assist the student in the process of becoming an educated person. The College seeks to translate into modern idioms the traditional vision of education as a preparation for life. Its core courses and seminars, sharing a common concern with the changing nature of society and culture, aim at the development of an informed critical consciousness.

Emphasis is also placed on sharpening the basic expressive and analytic tools indispensable to social and cultural understanding. All College students are expected to present, or to acquire, a knowledge of a second language (normally, French), necessary for their research and to write and to express themselves clearly. Training in research techniques is stressed, and original, independent work encouraged.

Liberal Arts College, linking demanding general education to significant specialization, is committed to serious intellectual work. Through its curriculum, staff, standards, and academic environment, it hopes to communicate the excitement and creativity of such engagement to its students.

Liberal Arts College Admission and Program Requirements

Students admitted to the University and seeking to enter the College must have a “B” average from cégep, or its equivalent. All students upon admission must demonstrate proficiency in English composition and a second language, or undertake necessary make-up work.* All applicants should apply through the Office of the Registrar; they should also call or write the College for an interview. Mature students are admitted to the College on the basis of an interview and an examination of their record. Full-time degree candidates will normally complete their College core curriculum within three academic years; part-time degree candidates should complete their College core curriculum within six academic years. Students who have been admitted to departmental Honours programs must maintain a “B” average in their College core curriculum; all others must maintain a “C” average in their College core curriculum. All Honours students in the College are expected to undertake significant original work, on a staff-guided basis, in their final year.

**Les étudiantes et étudiants francophones devront donner la preuve de leur connaissance de la langue anglaise.*

Staff

Faculty fellows chosen from the University's Departments form the staff of all College courses, seminars, and tutorials. Teaching fellows are resident in the College, as is its principal, who also teaches in the core curriculum.

Facilities

Liberal Arts College is located on Concordia University's downtown Sir George Williams Campus. Its seminar and tutorial teaching is done in the same building that houses the College's principal and core fellows. The College has student study areas, a course-materials library, and audio-visual facilities, as well as common room and a collection of important newspapers, journals, and periodicals. The College, the focus of an extra-curricular program of visiting speakers and cultural events, is a place where the exchange of ideas and views generated in courses and seminars continues on a more informal basis.

Counselling

Close student-faculty contact and exchange is part of the Liberal Arts College's stress on serious intellectual work. Each student is assigned to a faculty fellow who acts as a personal adviser, and who follows the student's progress through the College, advising on the choice of disciplinary or area specialization. All students' work is evaluated annually by the principal and fellows.

College Council

Council, composed of fellows and students, is the formal decision-making body of Liberal Arts College. It meets regularly, chaired by the principal, as a forum in which current issues and future policy are discussed and decisions taken. Council is that body which ensures the democratic participation of all members of the College in its on-going academic and extra-curricular work.

Programs

All Liberal Arts College students must take the core curriculum. These interrelated courses constitute a significant segment of the course work required for College-sponsored BA programs. Liberal Arts College stresses Honours-level work, although a student may, with the permission of the College, combine the core curriculum with a departmental Specialization or Major program, or with the Individual Studies programs. Selected students may, with College permission, be admitted to the College's BA Major in Western Society and Culture.

42 Liberal Arts College — Core Curriculum

<i>Stage I</i>		<i>Stage III</i>	
18	LBCL 291 ⁶ , 292 ⁶ , 295 ⁶	6	LBCL 490 ⁶
<i>Stage II</i>			
18	LBCL 391 ⁶ , 393 ⁶ , 396 ³ , 397 ³		

In addition to completing the core curriculum, students must meet the Faculty of Arts and Science degree requirements and complete a departmental Major, Specialization, or Honours program, or the Individual Studies program, or the Major in L.A.C. Western Society and Culture.

The core curriculum may also be applied towards Specialization or Honours work in the Individual Studies Program. (See §31.170 of this Calendar).

All College students must consult with a College adviser before selecting courses in other disciplines or fields. Generally, courses in the Liberal Arts College are open only to members of the College.

Honours candidates must maintain a "B" average in their College courses, with no grade lower than a "C". Students in a Major or Specialization program must maintain a "C" average in their College courses, with no grade lower than a "D".

42 BA Major in Western Society and Culture		30 Minor in Western Society and Culture	
<i>Stage I</i>		<i>Stage I</i>	
18	LBCL 291 ⁶ , 292 ⁶ , 295 ⁶	18	LBCL 291 ⁶ , 292 ⁶ , 295 ⁶
<i>Stage II</i>		<i>Stage II</i>	
18	LBCL 391 ⁶ , 393 ⁶ , 396 ³ , 397 ³	12	LBCL 391 ⁶ , 393 ⁶
<i>Stage III</i>			
6	LBCL 490 ⁶		

The College advises students who are enrolled in the BA Major in Western Society and Culture to take, in addition, some form of concentrated study (Major, Minor, etc.) within a single Department or field of study.

Further information on core courses and College programs generally may be obtained either by writing for the Liberal Arts College Informational Brochure or by calling the Liberal Arts College. Personal interviews with a fellow of Liberal Arts College may be arranged through the secretary.

Admission into a departmental Honours program requires the approval of the Department.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

LBCL 291 *Structure and Dynamics of Western Civilization I* (6 credits)

Prerequisite: Registration in the Liberal Arts College, or permission of the College. This course emphasizes the intellectual, cultural, and political traditions from the Biblical period and classical antiquity to the mid-seventeenth century. Texts studied are related to changing social and historical contexts. Primary sources may include *Genesis*, Plato, *Republic*, Marcus Aurelius, *Meditations*, Thomas Aquinas, *Summa Theologica*, Machiavelli, *Prince and Discourses*, and Spinoza, *Theological-Political Treatise*.

LBCL 292 *Modes of Expression and Interpretation I* (6 credits)

Prerequisite: Registration in the Liberal Arts College, or permission of the College. A study of major Western literary, religious, and philosophical traditions, involving the reading and interpretation of significant texts from antiquity to the mid-seventeenth century. Emphasis is placed on development of writing skills and interpretative analysis. Primary texts may include Homer, *Odyssey*, Plato, *Symposium*, Augustine, *Confessions*, Dante, *The Divine Comedy*, and Racine, *Phèdre*.

LBCL 295 *History of Art* (6 credits)

Prerequisite: Registration in the College, or permission of the College. This course is an integrated study of the nature of the visual arts from antiquity to the twentieth century. Artistic expression is examined through chronological and thematic approaches, with attention to the relation between art and society.

LBCL 298 *Liberal Arts College Selected Topics* (3 credits)

LBCL 299 *Liberal Arts College Selected Topics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LBCL 391 *Structure and Dynamics of Western Civilization II* (6 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. This course emphasizes the intellectual, cultural, and political traditions from the mid-seventeenth century to 1914. Texts studied are related to changing social and historical contexts. Primary texts may include Locke, *Second Treatise of Government*, Rousseau, *The Social Contract*, Wollstonecraft, *A Vindication of the Rights of Woman*, Marx, *Capital*, and Freud, *Dora*.

LBCL 393 *Modes of Expression and Interpretation II* (6 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. A study of major Western literary, religious and philosophical traditions from the mid-seventeenth century to 1914. Primary texts may include Stendhal, *The Red and the Black*, Diderot, *Le neveu de Rameau*, Goethe, *Faust*, Nietzsche, *The Genealogy of Morals*, and Baudelaire, *Les fleurs du mal*.

LBCL 396 *History of Music* (3 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295. This music history course is designed to introduce the important developments in the history of European music from the Classical period to the present day. Course content introduces students to musical structure, period styles, and selected works by major composers, setting these within their historical contexts.

LBCL 397 *The Sciences and Society* (3 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. The science component of the Liberal Arts College core curriculum emphasizes the nature of modern science, principally through its development across the nineteenth and twentieth centuries. Primary sources may include Darwin, *Origin of the Species* and Kuhn, *The Structure of Scientific Revolutions*.

NOTE: Students who have received credit for LBCL 493 may not take this course for credit.

LBCL 398 *Liberal Arts College Selected Topics* (3 credits)

LBCL 399 *Liberal Arts College Selected Topics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LBCL 490 *The Twentieth Century: Forms, Themes, Critiques* (6 credits)

Prerequisite: LBCL 391; LBCL 393; or permission of the College. This course emphasizes key issues in contemporary society and culture. Major twentieth-century texts and documents — philosophical, literary, political, and artistic, as well as analytical materials drawn from history and the social sciences, are read. Primary sources may include de Beauvoir, *The Second Sex*, Bell, *The Cultural Contradictions of Capitalism*, Woolf, *To the Lighthouse*, Levi, *Survival in Auschwitz*, Hayek, *The Fatal*

Conceit, as well as theorists such as Foucault, Irigaray, Kristeva, McKinnon, Lévi-Strauss, Barthes, and Derrida.

LBCL 491 ***Integrative Seminar*** (6 credits)
Prerequisite: Permission of the College. Students who have received credit for LBCL 490 may register for LBCL 491 provided the subject matter is different.

LBCL 498 ***Liberal Arts College Advanced Topics*** (3 credits)

LBCL 499 ***Liberal Arts College Advanced Topics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.530 LONERGAN UNIVERSITY COLLEGE

Principal

WILLIAM P. BYERS, *Professor, Mathematics and Statistics*

Fellows

SHEILA ARNOPOULOS, *Lecturer, Journalism*

PAMELA BRIGHT, *Associate Professor, Theological Studies*

WILLIAM BUXTON, *Professor, Communication Studies*

JOSEPH GAVIN, s.j., *Loyola Peace Institute*

JAMES MOORE, *Professor, Political Science*

FILIPPO SALVATORE, *Associate Professor, Classics, Modern Languages and Linguistics*

Emeriti Fellows

SISTER PRUDENCE ALLEN, RSM, *Professor Emeritus, Philosophy*

WOLFGANG BOTTENBERG, *Retired Professor Emeritus, Music*

MARK DOUGHTY, *Professor Emeritus, Chemistry*

EDMUND EGAN, *Retired Associate Professor, Philosophy*

LEONARD R. MENDELSON, *Retired Associate Professor, English*

Adjunct Fellow

WENDY SIMON, *Print Media and Photography*

<i>Location</i>	<i>Loyola Campus</i> 7302 Sherbrooke Street West (514) 848-2280
<i>Objectives</i>	<p>The members of Lonergan University College seek to engage in interdisciplinary dialogue about fundamental questions of value in culture, art, science, and religion. The College is dedicated both to studying Bernard Lonergan's interdisciplinary approach and to fostering students' capacities for interdisciplinary dialogue.</p> <p>As teachers and students of traditional disciplines in the University, members participate in a Fellows seminar, student seminars, and lectures at the College.</p>

Dedication

Lonergan University College is named in honour of Dr. Bernard F. Lonergan, a former student, and later a professor at Loyola College, Montréal. Dr. Lonergan's work has been recognized throughout the world and is the subject of several hundred books and dissertations. Recently, an international *Journal of Lonergan Studies* has been initiated in the United States.

General Philosophy

Lonergan University College exists for those students and professors who believe in an education beyond the current tradition of depersonalized and compartmentalized knowledge. Lonergan students maintain a regular department-based program of studies. At the same time, however, they share with others the dynamics of human enquiry that transcends the narrowness of disciplinary methodologies.

Inquiry into "Value"

The Fellows of Lonergan University College are convinced that the deepest issues of life are implicitly involved in all the academic disciplines, and that both honesty and sanity demand that we attend to this fact and reflect upon it.

The scholarship of the College is clearly concerned with values: they may be values centred on the question "should it be done?" as opposed to "can it be done?"; they may be values so entrenched in fundamental assumptions as to appear self-evident and beyond argument; or they may be values considered by some to be ultimate and beyond rational understanding. In each case, the value systems are exposed and critically analysed, allowing the individual to come to his or her own conclusions.

Method

The College has adopted an educational strategy which is interdisciplinary and empirical.

This strategy is interdisciplinary and multi-disciplinary because central and ultimate issues of human life are involved in all disciplines; yet many of these issues overlap the traditional boundaries of knowledge and must be analysed without the dominance of any one perspective.

This strategy is empirical in the sense that all knowing begins with enquiry about experience of the world and of ourselves as subjects. Resulting judgement of truth and value must be verified through a methodologically precise appeal to this experience. Following this strategy, Lonergan students use their departmental study as a resource to be shared and extended by working with students and Fellows from other Departments on a common intellectual project as determined by one of the Lonergan courses.

The work and method of Bernard Lonergan are studied by many of our students. His influence is reflected in the concept of education at the College whether or not students choose to study his work explicitly.

The Style of the College

Loneragan University College offers its students all the resources of Concordia University. Lonergan students take a regular degree program in the Department of their choice on either of the two campuses of Concordia University. Moreover, the College aims to contribute to a style of life which will heighten intellectual experience and enrich personal growth during the student's university years. It does this, not by claiming to "raise standards", but rather by demanding that its students relate what they learn to their personal lives and deeper values.

A university is the place where the universe should be discussed and intellectually appropriated. Conversation, as much as courses or research, is at the heart of university life. It is precisely this aspect of university life that has been undermined in this century by the incredible growth in knowledge itself, and by the proliferation of specialities. What universal knowledge is now possible? What do students have in common to discuss?

Loneragan University College believes that there is something in common to be discussed, and dedicates its resources to assure the depth and vitality of that discussion. It involves all its members, both students and Fellows, in structured conversation that will grow in breadth and meaning through the three years of a student's university career.

Membership

Students may join the College with an intention to register for a LUCC course, and after an interview with the College principal. Students are entitled to use the College lounges and resource centre, to participate in the social and intellectual activities of the College, and to be a member of the Lonergan University College Student Association.

Students must fulfil the degree requirements of their own Faculty, and must be enrolled in either a departmental or interdisciplinary Major, Specialization or Honours program.

Once students have completed 12 credits of LUCC courses, they meet the requirements for membership in Lonergan University College. They will be graduated officially as Lonergan students and will have this fact noted on their transcripts.

Program

24 Minor in Lonergan Interdisciplinary Studies

Those students who are members of Lonergan University College, and who want to strengthen the academic component of their work in the College, may take the following academic minor:

- 3 LUCC 202³ The Creative Self
- 12 LUCC 399⁶ Lonergan College Seminar: the theme of the Lonergan College Seminar changes yearly. The seminar must be taken twice at six credits each time for a total of 12 credits
- 9 credits at the 300 or 400 level

College Facilities and Activities

The College is governed by a set of by-laws, and by a College Council composed of students and Fellows.

The central activity of the College is its weekly seminar. The seminar focuses each year on the work of a major thinker, one who has decisively influenced our culture for good or for evil. The topic will change each year, but the depth of human integration and social awareness of the authors we choose ensures continuity in our discussion. As participants in the seminar are competent in diverse academic disciplines, an understanding of the topic develops which on the one hand does justice to the diversity of contemporary awareness, and on the other demands levels of understanding which transcend technical jargon. An internationally recognized scholar will be invited to come to Lonergan University College as the "Distinguished Visiting Scholar", to lead the College seminar. The Visiting Scholar will also give university lectures and public addresses, as deemed appropriate.

Each student of Lonergan University College joins with a small number of others to form a seminar group. College Fellows will direct the group and be available for academic advising to students. These groups will meet for two hours every week.

Students and Fellows will be encouraged to share in College government, to participate in College events, and, in various ways, to make the College the centre of their lives at the University.

The College offers a comfortable lounge, a specialized library, and several quiet rooms for study. It also has a research centre for Lonergan studies with a complete set of manuscripts, and of published works.

Admissions and Applications

Students seeking admission to the College should fill in the appropriate section (Box D) of the University Admissions Application form. Interested students may also contact the College directly by telephoning, or by coming to the College, or else by writing to the College at the following address: 7141 Sherbrooke Street West, Montréal, Québec, H4B 1R6. Each candidate for admission will be invited to an interview with the principal.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

LUCC 202 *The Creative Self* (3 credits)

This course is cross-listed with INTE 202. This course explores the relationship between experience, understanding and coming to knowledge as a contemporary person in search of identity. It is structured around the exploration of these questions: How can life experience become a source of creative understanding? How can the learning process become one's own? What methods are available to help us learn how to learn? How can we learn to live what we know?

NOTE: Students who have received credit for LUCC 200 or INTE 202 may not take this course for credit.

LUCC 298 *Introduction to Selected Interdisciplinary Problems* (3 credits)

LUCC 299 *Introduction to Selected Interdisciplinary Topics* (6 credits)

Specific topics for these courses will be stated in the Undergraduate Class Schedule.

LUCC 333 *Interdisciplinary Approaches to the Study of Peace* (6 credits)

This course is cross-listed with INTE 333. This course aims to introduce students to the study of peace and enable them to think critically about contemporary circumstances that condition the search for peace. Using specific case studies and appropriate methodologies, the course examines the role of values, cultures, and ideologies in the attainment of peace. This course is presented in cooperation with the Loyola Peace Institute.

NOTE: Students who have received credit for LUCC 499A or INTE 333 or 499A may not take this course for credit.

LUCC 398 *Special College Seminar* (3 credits)

Students who for good reason cannot follow the regular College Seminar (LUCC 399) meet every second week for two semesters or every week for one semester, under the direction of a College Fellow. The same text is read as in the regular seminar, and the discussion has the same aim.

LUCC 399 *Loneragan College Seminar* (6 credits)

Every year, faculty and students at the College

engage in the study of a major thinker who has decisively influenced Western culture (e.g. Gandhi, Arendt, Dostoevsky, Galileo, Nietzsche, Freud, Darwin), or from time to time, a theme which the College Council feels to be particularly appropriate (e.g. Literary Criticism, Contexts of Canadian Cinema). The course is directed by a Visiting Scholar with particular expertise in the person or theme under discussion. The Visiting Scholar meets with the faculty and students bi-weekly and on the following week the students meet in small groups with individual Fellows.

LUCC 410 *The Works of Bernard Lonergan* (3 credits)

This course is cross-listed with INTE 410. This course engages students in the task of integrating their specific fields of studies into the more general enterprise of human knowing and deciding. It reflects upon this experience with the aid of Bernard Lonergan's methodology. The texts are selected from the work of Lonergan.

NOTE: Students who have received credit for INTE 410 may not take this course for credit.

LUCC 441 *Issues in Contemporary Values* (3 credits)

This course is cross-listed with INTE 441.

This course addresses central questions concerning what we love or detest, embrace or reject, prescribe or proscribe; what resources of human being, e.g. philosophical, psychological, or artistic, are implicitly or explicitly drawn upon in these choices; whether the choices we make are mere "preferences", or have objective status as values; and how these questions relate to the problems of our culture and our time. Through alternating emphases and faculty, the focus is changed from time to time.

NOTE: Students who have received credit for LUCC 440 or INTE 440 or 441 may not take this course for credit.

LUCC 498 *Loneragan University College Selected Problems* (3 credits)

LUCC 499 *Loneragan University College Selected Topics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.540 SCHOOL OF COMMUNITY AND PUBLIC AFFAIRS

Principal

DANIEL SALÉE, Professor, School of Community and Public Affairs, and Political Science

Vice-Principal

MARGUERITE MENDELL, Associate Professor, School of Community and Public Affairs

Associate Professor

ERIC SHRAGGE

Adjunct Professor

DAVID MACDONALD

Fellows

SHEILA ARNOPOULOS, Lecturer, Journalism
WILLIAM BUXTON, Professor, Communication Studies

CHANTAL MAILLÉ, Associate Professor,

Simone de Beauvoir Institute

ALAN NASH, Associate Professor, Geography

LORNA ROTH, Associate Professor,

Communication Studies

FILIPPO SALVATORE, Associate Professor,

Modern Languages and Linguistics

JOHN ZACHARIAS, Associate Professor and

Director, Urban Studies

Associate Fellows

HUBERT GUINDON, Professor, Sociology

MARVIN HERSHORN, Lecturer, Political

Science

Location	Sir George Williams Campus Annex C1, Room: 101 (514) 848-2575
Objectives	<p>The School of Community and Public Affairs (SCPA) offers a multidisciplinary program in public policy analysis. The School prepares its graduates to be knowledgeable participants in the policy-making process in the private, public, and community sectors.</p> <p>An innovative combination of academic and practical training exposes students to a wide range of public issues. In small classes encouraging participation, students develop specialized abilities to do research, to communicate, and to organize public consultations and debates. An internship program also enables students to gain the necessary experience of working in a public affairs job.</p> <p>The School will be of interest to excellent students in a variety of disciplines, including economics, history, political science, sociology, urban studies, journalism, communication studies, and business. While some of our students enter the work force upon completion of their undergraduate degree, the majority continue their education. SCPA graduates tend to do graduate work either in their disciplines or, more often, in professionally-oriented programs including Public or Business Administration, International Affairs, Industrial Relations, and Law.</p> <p>The historic Mackay Street building which the School occupies is an ideal site for small classes, public lectures, social events, and meetings. School facilities include a common room, a reading room and documentation centre, a seminar room, a computer room, and faculty and student offices.</p>

Program	<p>Students who enrol in the School of Community and Public Affairs must follow, in sequence, a three-stage program comprised of the following courses:</p> <table> <tr> <td>42 BA Major in Community, Public Affairs and Policy Studies</td><td>3 Chosen from SCPA 353³/SOCI 353³, SCPA 333³/SOCI 333³, SCPA 355³/SOCI 355³, SCPA 398³</td></tr> <tr> <td><i>Stage I</i></td><td><i>Stage III</i></td></tr> <tr> <td>12 SCPA 201³, 203³, 215³, INTE 296³</td><td>9 SCPA 411³, 412³, 498³</td></tr> <tr> <td>3 Chosen from SCPA 204³/POLI 204³ or SCPA 211³/POLI 211³</td><td>3 Chosen from SCPA 460³/COMS 460³, SCPA 461³/COMS 361³, SCPA 465³/COMS 465³</td></tr> <tr> <td>3 Chosen from SCPA 205³/HIST 205³ or SCPA 210³/HIST 210³</td><td></td></tr> <tr> <td><i>Stage II</i></td><td></td></tr> <tr> <td>9 SCPA 301⁶, 321³</td><td></td></tr> </table> <p>The Disciplinary Program</p> <p>Students enrolled in the SCPA Major program are expected to combine the School's core curriculum with a departmental Major, Specialization, or Honours program, and meet the Faculty of Arts and Science degree requirements.</p>	42 BA Major in Community, Public Affairs and Policy Studies	3 Chosen from SCPA 353 ³ /SOCI 353 ³ , SCPA 333 ³ /SOCI 333 ³ , SCPA 355 ³ /SOCI 355 ³ , SCPA 398 ³	<i>Stage I</i>	<i>Stage III</i>	12 SCPA 201 ³ , 203 ³ , 215 ³ , INTE 296 ³	9 SCPA 411 ³ , 412 ³ , 498 ³	3 Chosen from SCPA 204 ³ /POLI 204 ³ or SCPA 211 ³ /POLI 211 ³	3 Chosen from SCPA 460 ³ /COMS 460 ³ , SCPA 461 ³ /COMS 361 ³ , SCPA 465 ³ /COMS 465 ³	3 Chosen from SCPA 205 ³ /HIST 205 ³ or SCPA 210 ³ /HIST 210 ³		<i>Stage II</i>		9 SCPA 301 ⁶ , 321 ³	
42 BA Major in Community, Public Affairs and Policy Studies	3 Chosen from SCPA 353 ³ /SOCI 353 ³ , SCPA 333 ³ /SOCI 333 ³ , SCPA 355 ³ /SOCI 355 ³ , SCPA 398 ³														
<i>Stage I</i>	<i>Stage III</i>														
12 SCPA 201 ³ , 203 ³ , 215 ³ , INTE 296 ³	9 SCPA 411 ³ , 412 ³ , 498 ³														
3 Chosen from SCPA 204 ³ /POLI 204 ³ or SCPA 211 ³ /POLI 211 ³	3 Chosen from SCPA 460 ³ /COMS 460 ³ , SCPA 461 ³ /COMS 361 ³ , SCPA 465 ³ /COMS 465 ³														
3 Chosen from SCPA 205 ³ /HIST 205 ³ or SCPA 210 ³ /HIST 210 ³															
<i>Stage II</i>															
9 SCPA 301 ⁶ , 321 ³															

Performance Requirements

Students are required to maintain an average of "B-" in program courses.

Entrance Requirements

Students admitted to the University and seeking to enter the School must have achieved a "B" average, or the equivalent at the previous educational level. Students wishing to enter the School will be interviewed personally and asked to complete a writing test. The interview process also serves to evaluate their language skills in both English and French. In exceptional circumstances, a candidate who has failed to meet the grade requirements might be admitted on the basis of a personal assessment of potential capacities.

For further information on curriculum, programs, personnel, and objectives, please call (514) 848-2575.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

SCPA 201 *Introduction to Public Policy and the Public Interest*
(3 credits)

This course introduces students to the theoretical, philosophical, and ethical foundations as well as the social logic of public policy formulation in modern societies. Using a multidisciplinary approach, it pays particular attention to the complex interaction between groups, individuals, and institutions in society, and brings students to consider issues related to the nature of the modern state, business-government relations, the labour movement, non-profit and community organizations, the influence of interest groups, media and international institutions on the policy agenda.

NOTE: Students who have received credit for SCPA 300 may not take this course for credit.

SCPA 203 *Community and Public Affairs in Québec and Canada*
(3 credits)

This course examines the interaction between civil society organizations and the state in the particular context of Québec and Canada. It focuses on the labour movement, social movements and interest groups, and analyses their role and influence in the policy-making process in Québec and Canada, especially with regard to social policy, socio-economic development and human rights.

NOTE: This course is taught in French.

NOTE: Students who have received credit for SCPA 300 may not take this course for credit.

SCPA 204 *(also listed as POLI 204)*
Introduction to Canadian Politics (3 credits)

This course is a basic introduction to the fundamental issues of Canadian public life and the federal political system. It presents an overview of the constitution, institutions, political parties, electoral system, interest groups, and public opinion that represent the essential components of Canada's political culture and government.

NOTE: Students required to take this course under Political Science as part of a Major or Specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA adviser.

SCPA 205 *(also listed as HIST 205)*
History of Canada, Post-Confederation (3 credits)

A survey of Canadian history from Confederation to the present, emphasizing readings and discussions on selected problems.

NOTE: Students required to take this course under History as part of a Major or Specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA adviser.

SCPA 210 *(also listed as HIST 210)*
Québec since Confederation
(3 credits)

A survey of the history of Québec from the time of Confederation until the present. While due emphasis is placed on political developments in the province, the purpose of the course is to acquaint the student with the significant economic and social trends in modern Québec.

NOTE: Students required to take this course under History as part of a Major or Specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA adviser.

SCPA 211 *(also listed as POLI 211)*
Québec Politics and Society/ La vie politique québécoise
(3 credits)

This course is a study of the changing party structure and political issues in Québec and their relationship to constitutional, cultural, and economic factors.

On étudiera dans ce cours l'évolution structurelle des partis et des questions politiques au Québec en fonction de facteurs d'ordre constitutionnel, culturel et économique.

NOTE: Students required to take this course under Political Science as part of a Major or Specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA adviser.

NOTE: The course will be offered in both English and French on a rotational basis. Please consult the Undergraduate Class Schedule for details.

SCPA 215 *Economics for Public Policy and Community Development*
(3 credits)

Based on an overview of current economic issues, this course introduces students to the fundamental, analytical tools and concepts that are necessary to understand economic public policy and relevant to community development and empowerment.

SCPA 298 *Selected Topics in Community and Public Affairs* (3 credits)

SCPA 299 *Selected Topics in Community and Public Affairs* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCPA 301 *Social Debates and Issues in Public Affairs and Public Policy* (6 credits)

Prerequisite: Successful completion of Stage I. This course emphasizes a deeper understanding of the process by which public policies are developed, implemented, and advocated, and of the role played by various institutions or groups in this process. Each year, a new set of key policy issues is selected for discussion and analysis. Students work in teams and are required to do case studies of institutions or groups relevant to the policy or public affairs issue they have chosen. The focus is on developing both communication skills, through oral and written presentations, and organizational skills as each team must organize one public panel discussion on one of the selected issues. The course takes place over the Fall and Winter Terms.

NOTE: Students who have received credit for SCPA 401 may not take this course for credit.

SCPA 321 *Public Affairs Strategies*
(3 credits)

Prerequisite: Successful completion of Stage I or permission of the School. This course examines and analyses the ways in which corporate, public, and community organizations anticipate, monitor, and manage their relations with the social, political, and environmental forces which shape their operations and influence their action in their respective field. It familiarizes students with the strategies most often used in public affairs management, and develops the skills required for effective results.

SCPA 333 *(also listed as SOCI 333)*
Political Sociology (3 credits)

Prerequisite: Successful completion of Stage I. This course is concerned with the nature, organization, distribution, determinants, and consequences of power in social systems.
NOTE: Students required to take this course under Sociology as part of a Major or Specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA adviser.

SCPA 353 *(also listed as SOCI 353)*
Community Studies (3 credits)

Prerequisite: Successful completion of Stage I. This course involves the study of communities both as locales and as symbolic constructions. The major theoretical approaches used in community studies are evaluated in relation to research and applied interests. Special attention is given to sensitizing students to issues concerning gender, race, ethnicity, and class at the community level.

NOTE: Students required to take this course under Sociology as part of a Major or Specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA adviser.

SCPA 355 *(also listed as SOCI 355)*
Urban Regions (3 credits)

Prerequisite: Successful completion of Stage I. This course reviews the work of anthropologists and sociologists in cities. The focus is on the social organization of social life in First and Third World urban spaces. Consideration is also given to the particular dynamics of fieldwork in urban settings.

NOTE: Students required to take this course under Sociology as part of a Major or Specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA adviser.

SCPA 398 *Special Area Study in Community and Public Affairs*
(3 credits)

Prerequisite: Successful completion of Stage I. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCPA 411 *Internship* (3 credits)

Prerequisite: Successful completion of Stages I and II. An essential part of the School's program is a one-semester apprenticeship in some aspect of community and public affairs. After completing 60 credits of the BA program, including Stages I and II, students are required to complete a practicum that will allow them to test their skills in a real situation. Placements may be drawn from all areas of possible employment, including the private sector, government and community service organizations. Students are expected to participate fully in finding and defining possible internships. Employers are asked to join in an evaluation of the work period. Students are required to submit a written report which summarizes and evaluates their work experience.

SCPA 412 *Senior Research Seminar*
(3 credits)

Prerequisite: Successful completion of Stages I and II. In this course, students work in groups and are required to play out the position of a given corporate, public, or community organization in a simulation of real-life interaction between social and political actors over a

particular policy issue. To this end, they must research and prepare all the necessary material (such as briefs, position papers, press kits) that will allow them to defend and make their policy position known. The actual simulation takes place in a one-day event at the end of the term.

SCPA 460 (also listed as COMS 460)
Political Communication
(3 credits)

Prerequisite: Successful completion of Stages I and II. The relationships between media institutions and political institutions, both in Canada and internationally, are examined. Issues such as: the flow of political information; the social and political construction of news; the politics of regulation; the politics of influence in campaigns, nation-building socialization through media; ideology in the media, and alternatives to traditional media are explored.

NOTE: Students required to take this course under Communication Studies as part of a Major or Specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA adviser.

SCPA 461 (also listed as COMS 361)
Seminar in Propaganda
(3 credits)

Prerequisite: Successful completion of Stages I and II. The aim of this course is to recognize the orchestration of the elements of propaganda in media, and to develop the means to deal with

it. Course methodology includes lectures, discussions, and projects.

NOTE: Students required to take this course under Communication Studies as part of a Major or Specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA adviser.

SCPA 465 (also listed as COMS 465)
Rhetoric and Communication
(3 credits)

Prerequisite: Successful completion of Stages I and II. This course focuses upon communication as persuasive or as producing identification. Emphasis is placed upon the role of communication in civic affairs. Classical and contemporary approaches to rhetorical theory and criticism are examined.

NOTE: Students required to take this course under Communication Studies as part of a Major or Specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA adviser.

SCPA 498 Special Topics in Community, Public Affairs and Policy Studies (3 credits)

Prerequisite: Successful completion of Stages I and II. This course provides focused, in-depth examination and analysis of a particular policy topic, public affairs issue, or problem of community development. The subject of inquiry changes every year.

31.550 SCIENCE COLLEGE

Principal
MICHAEL von GRUNAU, *Professor, Psychology*

Fellows
PETER H. BIRD, *Professor, Chemistry and Biochemistry*
JOHN CAPOBIANCO, *Professor, Chemistry and Biochemistry*
DAVID CHÉEKE, *Professor, Physics*
JAMES GRANT, *Associate Professor, Biology*
RICHARD L. HALL, *Professor, Mathematics and Statistics*
DAVID JACK, *Assistant Professor, Chemistry and Biochemistry*
PAUL JOYCE, *Associate Professor, Chemistry and Biochemistry*
CALVIN S. KALMAN, *Professor, Physics*
HERSHY KISILEVSKY, *Professor, Mathematics and Statistics*
EDWARD J. MALY, *Professor, Biology*

SHEILA MASON, *Associate Professor, Philosophy*
JOHN McKAY, *Professor, Computer Science*
DAVID MUMBY, *Associate Professor, Psychology*
ELAINE B. NEWMAN, *Professor, Biology (Founding Principal)*
JUDITH PATTERSON, *Associate Professor, Geology*
DIANE POULIN-DUBOIS, *Associate Professor, Psychology*
ROBERT M. ROY, *Professor, Biology*
RAMESH C. SHARMA, *Associate Professor, Physics*
PETER SHIZGAL, *Professor, Psychology*
JANE STEWART, *Professor, Psychology*
REGINALD STORMS, *Professor, Biology*
MANFRED SZABO, *Professor, Mathematics and Statistics*

Location

Sir George Williams Campus
Annex X, Room: 105
(514) 848-2595

Objectives

The aim of the Science College is to prepare students enrolled in one of Concordia's science programs for a life of research, teaching, or some similarly demanding intellectual pursuit in a profession. The academic program of the College complements the regular undergraduate curriculum and includes cross-disciplinary courses and student participation in laboratory research activities from the first year on. The collegial atmosphere fosters interaction among students and between students and faculty.

In Science College, students will gain an understanding of several areas of science, while specializing in whichever one they choose. Curricular structures frequently restrict students to a single discipline. To help counteract excessive specialization, the Science College has designed a series of courses to show what practising physicists think about physics; what mathematicians do when they are thinking mathematics: — not “an introduction to”, but “the state of the art”. The College provides an opportunity for students to become acquainted with science as practised and understood by scientists today. Its curriculum is planned to fulfil the primary goals of the College — to provide an opportunity for experience in a research environment, for thinking about the nature of science, and for becoming aware of the style and content of the various scientific disciplines. In Science College, students have the opportunity to work individually with active research scientists. This is done through a program of directed or independent study in each undergraduate year which enables them to undertake or participate in projects of discovery in a variety of different areas of scientific endeavour. Students of the College will also be provided with an opportunity to consider the nature of science. The College offers courses in the intellectual and social context of science. Designed specifically for College students, these courses raise questions of broad interest to scientists and presume an understanding of the subject matter of science itself. Students will also be given the opportunity to consider the social and cultural framework of their science studies through a basic course in some aspect of humanistic studies. Finally, students will be encouraged to appreciate the link between clarity of thought and clarity of expression, through the availability of tutorial assistance in the development of writing skills.

Facilities

The College has study and lounge areas, computer facilities, a small library, and a few periodicals of general interest. The College offers students the opportunity and facilities to discuss matters of

interest among themselves and with their professors. Science College also offers a number of courses and invites scientists to visit the University to meet College students.

Requirements for Admission to Science College

The program of Science College is academically demanding, involving concentration in one discipline and a critical investigation of other aspects of science. The College is committed to serious academic work and high standards, and seeks to attract talented and enthusiastic students who are willing to work hard in a search for a deeper understanding of their subject.

Science College represents a new departure at Concordia's downtown campus. Students must enrol in a science program that leads to a BSc degree in order to be part of Science College. Students registered for a BA in Journalism are also eligible, as are students registered in the General Science Option of Computer Science.

In addition to the normal requirements for admission to the University's various programs, applicants are expected to have a good academic average. They will be considered on the basis of their academic record, and a personal interview. Preference will be given to students who show a disposition and an aptitude to profit from the unique features of the sort of fundamental scientific education which the College offers. Applicants are encouraged to provide evidence of the range of their intellectual interests and of any creative activity in which they may have been involved. Students must be prepared to attend courses at times outside the normal University schedule. The College is open to full-time students only.

Science College and Journalism

A limited number of students who have been admitted to the Major in Journalism program may be allowed to register in the Science College, with a view to combining a basic understanding of science with a training in journalism. For such students, a second six-credit course in the historical, philosophical, and social aspects of science will be offered. Other members of the College will have the option of taking this course if they so desire.

Performance Requirement

Students in the College must maintain a "B" average in courses offered by the College, with no grade lower than a "C".

Further Information

Further information on the courses and activities of the Science College may be obtained either by writing or by telephoning the College office. Personal interviews with a fellow of the Science College may be arranged through the Science College office.

Science College Core Curriculum

The College offers a core of courses which is required of all students. This core consists of 30 of the 90 credits normally required for a BSc degree. These courses have been developed specifically for the College with the intention of providing a unique, integrated program of education in science.

<i>Programs</i>	<i>In addition to completing the core curriculum, students are responsible for satisfying their particular degree requirements by completing a departmental Honours, Specialization, or Major program leading to a BSc.</i> <i>The superscript indicates credit value.</i>		
	30 Science College Curriculum	6	Chosen from LBCL 291 ⁶ , 292 ⁶
	3-9 Chosen from SCOL 251 ³ , 252 ³ , 253 ³ , 351 ³ , 352 ³ , 353 ³	6	SCOL 290 ³ , 390 ³
	6 SCOL 270 ⁶	6	SCOL 490 ⁶
		3-9	SCOL 398 ^{3*}
	*This course may be repeated twice for credit in this program provided the subject matter is different.		

<i>Courses</i>	<i>Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.</i>		
	SCOL 251 <i>Current Issues in Physical Sciences I</i> (3 credits) Prerequisite: Membership in the Science College, or permission of the College. These courses are designed to help students understand the "state of the art" in fields of science in which they are not specializing. They discuss problems under current study, and	attempt to identify possible future directions of research. The approach is qualitative. Detailed technical knowledge is not prerequisite.	
		SCOL 252 <i>Current Issues in Biological Sciences I</i> (3 credits) Prerequisite: Membership in the Science College, or permission of the College. For description see SCOL 251 above.	

SCOL 253 *Current Issues in Mathematical and Related Sciences I*
(3 credits)

Prerequisite: Membership in the Science College, or permission of the College. For description see SCOL 251 above.

SCOL 270 *Historical, Philosophical, and Social Aspects of Science*
(6 credits)

Prerequisite: Membership in the Science College, or permission of the College. This course discusses the intellectual framework of science and the relationships between science and society, and the political and philosophical questions inherent in the scientific process. Students are expected to understand the scientific issues at the level at which they were originally addressed.

SCOL 290 *Directed and Independent Study I* (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. The student works under the supervision of a member of the Faculty on either a practical laboratory project or a literature study. A formal, written report is required.

SCOL 298 *Selected Topics in a Scientific Discipline* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCOL 351 *Current Issues in Physical Sciences II* (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. For description see SCOL 251 above.

SCOL 352 *Current Issues in Biological Sciences II* (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. For description see SCOL 251 above.

SCOL 353 *Current Issues in Mathematical and Related Sciences II*
(3 credits)

Prerequisite: Membership in the Science College, or permission of the College. For description see SCOL 251 above.

SCOL 390 *Directed and Independent Study II* (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. A student who has completed SCOL 290 registers for SCOL 390. Students are encouraged to work in a field different from that of their SCOL 290 project.

SCOL 398 *Topics for Multidisciplinary Study* (3 credits)

The purpose of this course is to introduce students to problems and areas of study which transcend traditional disciplinary barriers. A chosen area of investigation is treated from the viewpoint of various disciplines. Lecturers from different areas may be used for this purpose. The aim is to show the contributions made by each field to the understanding of the problem, and how they complement each other.

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCOL 490 *Directed and Independent Study III* (6 credits)

Prerequisite: Membership in the Science College, or permission of the College. A student who has completed SCOL 390 registers for SCOL 490. Students are encouraged to work in a field different from that of their SCOL 290 and 390 projects. Students complete a research project approved in advance by the College, under the supervision of a fellow of the College and/or a faculty member in a scientific discipline.
NOTE: After consultation with the Science College, a student may register in BIOL 490, CHEM 450, GEOL 414, or PSYC 430 and upon successful completion be exempted from SCOL 490.

SCOL 498 *Advanced Topics* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.560

SIMONE DE BEAUVOIR INSTITUTE AND WOMEN'S STUDIES

Principal
LILLIAN S. ROBINSON

Associate Professor
CHANTAL MAILLÉ

Fellows
STANLEY G. FRENCH
LORNA ROTH
ROSEMARIE SCHADE
MAÏR E. VERTHUY

Research Associates
ANNA ANTONOPOULOS-ALEXANDER
SIMA APRAHAMIAN

MICHIKO ARAMAKI
ROKSANA BAHRAMITASH
KARIN DOERR
SHEENA GOURLEY
DANA HEARNE
NILIMA MANDAL-GIRI
BARBARA MEADOWCROFT

Retired Fellows
ARPI HAMALIAN
ELIZABETH HENRIK
E. SUSAN HOECKER-DRYSDALE
PATRICIA MORLEY
JO VELLACOTT
KATHERINE E. WATERS

Location

Sir George Williams Campus
Annex MU, Room: 202
(514) 848-2370

Objectives

The Institute strives to stimulate the investigation and understanding of the role of women in society and to encourage women to develop their creative potential. In research and teaching, special attention is given to gender, race, class, and sexual orientation.

The Institute has several objectives: to investigate the history, current situation, and changing needs of women; to generate support for research topics relevant to women; to encourage full recognition of women's contribution to human achievement; to ensure that women and gender issues are studied in a non-discriminatory manner; to strengthen women's rights and the conditions for exercising them; to ensure the equality of all individuals without distinction of race, sex, age, language, or religion. Women's Studies encompass and modify all areas of knowledge. Through the introduction of new perspectives and new research, this field of study helps to correct and complete the traditional scholarly record. It is in essence interdisciplinary and multidisciplinary since the specificity of the condition of women embraces all existing disciplines. It thus questions the concept and structures of knowledge contained within the disciplinary boundaries and contributes to bringing about a reunification of the knowledge and scholarship that has become increasingly fragmented.

SIMONE DE BEAUVOIR INSTITUTE

Founded in 1978 to promote the understanding of the historical and contemporary situation of women in society, the Simone de Beauvoir Institute of Concordia University helps women to discover and develop their potential, both by its academic base in Women's Studies and by its co-curricular activities. We are honoured that Simone de Beauvoir authorized us to use her name, and expressed great interest in being informed of our activities.

All students registered in the Major, Minor, or Certificate in Women's Studies are members of the Institute. Other undergraduate students are welcome to become members if they undertake to complete nine credits of WSDB courses. The choice of these courses must be approved in advance by the principal or her delegate.

The co-curricular life of the Institute is extremely important, and all members are expected to contribute to our activities. Exciting opportunities are available to organize workshops, colloquia, and debates on subjects which interest the members, as well as to collaborate with women's organizations outside the University on research projects and other joint ventures.

Admission Requirements for the Simone de Beauvoir Institute

Students may apply simultaneously to Concordia University and the Simone de Beauvoir Institute by filling out and submitting the Concordia University Application for Admission with the box for "colleges" checked and "Simone de Beauvoir Institute" written in the space provided. The Admissions Application Centre will inform us of your application as soon as they receive it. Further information about the Institute can be obtained by calling us or by visiting our offices.

Programs

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

Students should consult with the Women's Studies adviser prior to registering for Women's Studies courses.

60 BA Specialization in Women's Studies

Group I

- 9 WSDB 290³, 291³, 292³
- 6 WSDB 380³, 480³
- 12 WSDB 381³, 382³, 383³, 390³, 391³, 392³
- 12 WSDB 490³, 491³, 496⁶
- 3 WSDB at the 400 level

Group II

- 18 Chosen in consultation with the Women's Studies adviser from WSDB 298³, 398³, 498³; AHSC 253³; CLAS 261³; COMS 368³; ECON 397³; EDUC 321³; ENGL 289⁶, 331³, 351³; FLIT 362³, 471³, 472³, 474³; HIST 329³, 331³, 478³; POLI 309³, 326³, 328³; PSYC 368³, 391³, and all Women and Religion courses; SOCI 272⁶, 276⁶, 374³; ANTH 308³; and from the Faculty of Fine Arts: FMST 329³, 409³; WFAR 320⁶, 420⁶

NOTE: Students are admitted based on a letter of intent to be evaluated by the Women's Studies Undergraduate Committee. Students are expected to maintain an overall WGPA of 3.0.

42 BA Major in Women's Studies

Group I

- 9 WSDB 290³, 291³, 292³
- 6 WSDB 380³, 480³
- 6 Chosen from WSDB 390³, 391³, 392³
- 3 Chosen from WSDB 490³, 491³

LIST A

WSDB 298³, 381³, 382³, 383³, 398³, 498³; AHSC 253³; CLAS 261³; COMS 368³; ECON 397³; EDUC 321³; ENGL 289⁶, 331³, 351³; FLIT 362³, 471³, 472³, 474³; HIST 329³, 331³, 478³; POLI 309³, 326³, 328³; PSYC 368³, 391³; RELI all courses under *Women and Religion*; SOCI 276⁶, 378⁶, 474³; ANTH 276⁶; SPAN 430³; FMST 329³, 409³; WFAR 320⁶, 420⁶

NOTE: Students should consult the appropriate Departments concerning possible prerequisites for the courses in List A.

NOTE: WSDB 290 and 291 are also offered in French. For additional information, please consult the Undergraduate Class Schedule.

Language/Langue

Les règlements actuels permettent à toute étudiante et tout étudiant d'écrire ses devoirs ou examens en anglais ou en français dans tous les cours offerts, à l'exception des cours de langue. La langue d'enseignement sera normalement l'anglais.

Non-francophone students may equally submit assignments in English in Français 451, 476, and 477, as long as they are taking the course for credit in Women's Studies or as an elective, and not as part of a program of the Département d'études françaises.

Group II

- 18 Chosen in consultation with the Women's Studies adviser from List A

30 Minor in Women's Studies

Group I

- 9 WSDB 290³, 291³, 292³
- 6 WSDB 380³, 480³
- 6 Chosen from WSDB 390³, 391³, 392³
- 3 Chosen from WSDB 490³, 491³

Group II

- 6 Chosen in consultation with the Women's Studies adviser from List A

30 Certificate in Women's Studies

Group I

- 9 WSDB 290³, 291³, 292³
- 6 WSDB 380³, 480³
- 6 Chosen from WSDB 390³, 391³, 392³
- 3 Chosen from WSDB 490³, 491³

Group II

- 6 Chosen in consultation with the Women's Studies adviser from List A

Students may transfer into the Certificate program up to 12 credits earned in an incomplete degree or Certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

WSDB 290 Introduction to Women's Studies I (3 credits)

This course provides an introduction to the lives

and conditions of women in historical contexts. It is suited both to those interested in women's issues in general and students enrolled in

Women's Studies. Topics range from lesbianism, motherhood, violence, racism, and family to women's economic status, and women's resistance.

WSDB 291 *Introduction to Women's Studies II* (3 credits)

This course looks at the lives and conditions of women in recent times; it explores systems of domination and women's resistance to them. It investigates how women have empowered themselves within these systems and have struggled for, and achieved, change. Topics may include women's organizations, socialization, education, language, economic and political structures.

WSDB 292 *Feminisms and Research Methods* (3 credits)

Prerequisite: Enrolment in a Women's Studies program or permission of the Institute. This course exposes students to a variety of research practices such as: oral history, case studies, multi-media representation, survey/content analysis, library research, and field work. It encourages students to think critically, and to improve their ability to gather, analyse, and effectively present ideas and information.

WSDB 298 *Selected Topics in Women's Studies* (3 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

WSDB 370 *Workshops in Special Areas of Women's Studies* (3 credits)

Prerequisite: WSDB 290; WSDB 291. The purpose of these workshops is to examine a number of topics and problems related to the field of Women's Studies. The issues considered may differ from year to year; several workshops are offered over one academic year and students are required to select two workshops of one and a half credits each or three workshops of one credit each from the package. The workshop format is designed to allow Women's Studies students to participate in learning opportunities with flexibility in scheduling as well as to benefit from the experience of experts who visit Montréal on a short term basis. Possible topics are women and biotechnology; education of immigrant women, women and continuing education; women and pressure groups.

WSDB 380 *Feminist Thought I* (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, and 292, and nine credits from other WSDB or elective courses. This course seeks to deconstruct the ideological premises of knowledge-production and provides an overview of various modes of knowledge, theory, and activism among women in different cultural contexts. These types of knowledge range from storytelling to academic theorizing. The course

provides key concepts and critical approaches for Feminist Thought II.

NOTE: Students who have received credit for WSDB 394 may not take this course for credit.

WSDB 381 *First Nations' Women* (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, and 292, and nine credits from other WSDB or elective courses. This course aims to acquaint students with North American First Nations, particularly the women's contemporary realities. Other pedagogical objectives are to facilitate an understanding of cultural perception; to develop a critical viewpoint of ethnocentrism in mainstream society; to introduce the current debate around minority representation, cultural appropriation, and post-colonial theory.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 382 *Science, Technology and Women's Lives* (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, and 292, and nine credits from other WSDB or elective courses. This course explores both historical trends and contemporary concerns regarding women, science, and technology. It investigates: stereotypes of science and scientists; western science vs. native knowledge; science as a social activity and as a career choice for women; and the effects of science and technology on women's lives.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 383 *Lesbian Issues and Realities* (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, 292, and nine credits from other WSDB or elective courses. This course introduces students to the field of lesbian studies and examines lesbian existence within a historical as well as a contemporary context. A central theme of the course is diversity among lesbians, not only in terms of race, class, ability but also in terms of political consciousness.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 390 *Women and Peace* (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, and 292, and nine credits from other WSDB or elective courses. This course covers a series of themes related to feminist peace politics such as violence, wars against women, militarism, roles played by women during wars, war mythologies, women in the military, the war industry and the new world order, feminist peace activism.

WSDB 391 *Health Issues: Feminist Perspectives* (3 credits)

Prerequisite: 18 credits, including WSDB 290,

291, and 292, and nine credits from other WSDB or elective courses. This course examines women's health issues in both a historical and a contemporary light. Topics analysed range from the treatment of women within the health care system to the social constructs of illness and the diversity of healing practices.

WSDB 392 *Féminismes dans la francophonie* (3 crédits)

Préalable: 18 crédits, dont WSDB 290, 291, et 292, plus 9 autres crédits en WSDB ou cours électifs. À partir de textes théoriques et d'ouvrages traitant de la vie quotidienne, ce cours examine les similitudes, les analogies et les traits distinctifs des luttes des femmes durant les deux dernières décennies, ici et ailleurs dans la francophonie, notamment les luttes des Arabes, des Antillaises ou des femmes d'Afrique noire.

WSDB 398 *Selected Topics in Women's Studies* (3 credits)

WSDB 399 *Selected Topics in Women's Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

WSDB 480 *Feminist Thought II* (3 credits)

Prerequisite: 30 credits, which must include WSDB 380 and nine other WSDB credits. This course uses the critical approaches studied in Feminist Thought I to explore the changes that have taken place in women's expression and interpretation of modes of knowledge and theory. The course focuses on the relationship between oppressive systems and the ways different women's groups have resisted them.

NOTE: Students who have received credit for WSDB 394 may not take this course for credit.

WSDB 490 *Advanced Seminar in Women's Studies* (3 credits)

Prerequisite: 30 credits, which must include WSDB 380 and nine other WSDB credits. This interdisciplinary seminar considers the effect of systems of gender, race, and class on women's place in society. It takes into account recent developments in feminist scholarship in the humanities and social sciences.

WSDB 491 *Advanced Seminar in Women's Studies* (3 credits)

Prerequisite: 30 credits, which must include WSDB 380 and nine other WSDB credits. This interdisciplinary seminar explores women's visions of the future and draws on historical and contemporary materials, both creative and scientific.

WSDB 496 *Directed Research* (6 credits)

Prerequisite: Enrolment in the Specialization in Women's Studies; 30 credits, including WSDB 290, 291, 292, 380, 480, and permission of instructor. Students work with an individual faculty member in a particular area of Women's Studies. Students are expected to produce a substantial research project.

WSDB 498 *Seminar in Women's Studies* (3 credits)

WSDB 499 *Seminar in Women's Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.



John Molson School of Business

61.10	<i>JOHN MOLSON SCHOOL OF BUSINESS</i>	61.60	<i>ECONOMICS</i>
61.20	<i>ADMISSION REQUIREMENTS</i>	61.70	<i>FINANCE</i>
61.21	<i>UNDERGRADUATE DEGREE PROGRAMS</i>	61.80	<i>INTERNATIONAL BUSINESS</i>
61.21.1	The Bachelor of/Baccalaureate in Commerce	61.90	<i>MANAGEMENT</i>
61.21.2	The Bachelor of/Baccalaureate in Administration	61.100	<i>MARKETING</i>
61.22	<i>THE CREDIT CORE</i>	61.120	<i>ADMINISTRATION</i>
61.22.1	Academic Performance Regulations	61.140	<i>PROGRAM OPTIONS FOR NON-COMMERCE STUDENTS</i>
61.30	<i>GENERAL INFORMATION</i>	61.150	<i>COMPUTER SCIENCE</i>
61.35	<i>JOHN MOLSON SCHOOL OF BUSINESS COURSES</i>	61.160	<i>SPECIAL CERTIFICATE PROGRAMS</i>
61.40	<i>ACCOUNTANCY</i>	61.170	<i>SPECIAL PROGRAMS IN ACCOUNTANCY</i>
61.50	<i>DECISION SCIENCES AND MANAGEMENT INFORMATION SYSTEMS</i>		

On November 15, 2000, the Faculty of Commerce and Administration at Concordia University became the John Molson School of Business. Please note that this change may not be reflected in all sections of this Calendar at the time of printing.

s e c t i o n

61

61.10 JOHN MOLSON SCHOOL OF BUSINESS

Faculty	Dean MOHSEN ANVARI	A. BAKR IBRAHIM, <i>Administrative Affairs and Human Resources</i> JERRY TOMBERLIN, <i>External Affairs and Executive Programs</i> JEAN MCGUIRE, <i>Graduate Programs, Research and Program Evaluation</i>
	Associate Deans DANIELLE MORIN, <i>Academic and Student Affairs – Undergraduate Programs</i>	
Location	Sir George Williams Campus Annex GM, Room: 403 (514) 848-2779	
Mission Statement	<p>"The primary purpose of the John Molson School of Business is to graduate employable students who are responsible community citizens. We acknowledge the centrality of our teaching mission and strive for excellence and innovation in our graduate and undergraduate programs. We place strong emphasis on research and scholarship and aim to create an intellectual climate in which varied inquiry about the theory and practice of management can flourish.</p> <p>As an urban business school we welcome our bilingual and multicultural constituency. We believe that an international faculty, diverse student body, strong links to the local business community along with academic relationships forged with international partners, provide a learning environment well suited to the demands of a globalizing and open economy.</p> <p>We are recognized for a long tradition of offering accessible, flexible and relevant commerce and administration programs to the Montréal community. The fundamental purpose of all our intellectual, scholarly and teaching endeavour is to equip our students with a range of essential competencies and values which help them achieve personal goals and make useful contribution to the communities in which they reside."</p> <p style="text-align: right;">Approved by Faculty Council • March 1996</p>	

61.20 ADMISSION REQUIREMENTS

General admission requirements are listed in §13.

A) Cégep profile*:

Mathematics 201-103, 201-105
Economics 383-920, 383-921
Computer Literacy

B) Non-cégep profile*:

Non-cégep requirements	Concordia Courses
Calculus I	MATH 209
Linear Algebra	MATH 208
Micro, Macro Economics	ECON 201, 203
Computer Literacy	INTE 290/COMP 201

**NOTE: Equivalencies will be determined at the point of acceptance.*

NOTE: Arrangements will be made in the first-year program to allow any accepted student the opportunity to complete any of the required prerequisite courses.

Cégep Entrance — the 90-credit program

The prerequisites for the 90-credit BComm or BAdmin degree are indicated in A) above. Students with a DEC will complete the 90-credit program. Students who have a complete DEC but are lacking one or more of the prerequisite courses may take them within the 90-credit program and those courses will count as elective credits.

Mature Entry — the 108-credit program

In addition to the 90-credit program, mature entry students will be required to complete the following 18 credits outside the offerings of the John Molson School of Business. Those credits are:

6 credits in MATH 208, 209
6 credits in ECON 201, 203

- 3 credits in INTE 290/COMP 201
- 3 additional elective* credits.

**These elective credits must be selected from outside the offerings of the John Molson School of Business.*

Four-Year Program — the 120-credit program

In addition to the 90-credit program, students in the four-year program will be required to complete the following 30 credits outside the offerings of the John Molson School of Business. Those credits are:

- 6 credits in MATH 208, 209
- 6 credits in ECON 201, 203
- 3 credits INTE 290/COMP 201
- 6 credits in an English composition course (e.g. ENGL 212, 213)
- 9 additional elective* credits.

**These elective credits must be selected from outside the offerings of the John Molson School of Business.*

NOTE: Because of the extensive use of computers in various programs, students are advised to have access to a personal computer.

61.21 Undergraduate Degree Programs

The John Molson School of Business offers two distinct undergraduate programs. The Bachelor of/Baccalaureate in Commerce (BComm) is a structured program in which the student will select a Major from those offered by the School of Business. The Bachelor of/Baccalaureate in Administration (BAdmin) is a flexible program which permits the student to pursue interests outside the School of Business, and offers the possibility of complementing a fundamental grounding in Administration with Minor concentrations in an area of interest. Degree requirements listed below apply to all students entering the program on or after June 1, 2000.

61.21.1 The Bachelor of/ Baccalaureate in Commerce

This program involves education in all aspects of business with emphasis on one particular area. The first year introduces students to operational skills, attitudes, and the necessary functional tools. The second year blends theory and practice to prepare students to analyse, formulate, evaluate, and resolve business challenges. The final year is a combination of the core, electives, and the student's Major.

Degree Requirements:

- 42 credits from the core
- 12 elective credits outside the School of Business
- 24–27 credits to apply towards the Major
- 9–12 elective credits chosen by the student

NOTES:

1. All students are required to declare a Major.
2. There are no Double Majors or Double Minors in the John Molson School of Business. The School may impose quotas on some Majors.

61.21.2 The Bachelor of/ Baccalaureate in Administration

The aim of the BAdmin is to develop capable problem-solvers and decision-makers. The program provides students with a fundamental grounding in administration and offers them the opportunity to pursue a wide range of interest amongst the various courses offered by the University.

Degree Requirements:

- 42 credits from the core
- 18 credits from within the School of Business and/or its disciplines
- 30 elective credits chosen by the student, but outside the School of Business, 15 of these must be beyond the introductory level.

NOTE: For both the BComm and the BAdmin, students may take up to a maximum of six credits in ESL courses.

61.22 The Credit Core

The John Molson School of Business has revised its core effective September 2001. Students accepted into the John Molson School of Business prior to these changes must adhere to the *Undergraduate Calendar* of the year of their acceptance into the program. Students who wish to discuss any adjustments to their program based on the new changes, may consult the academic adviser.

NOTE: Students are responsible for following the correct sequence of courses required for the completion of a particular program.

The required 42-credit core is identical for both programs and comprises the following courses:

1st Year

Semester 1

COMM 210 Contemporary Business Thinking

COMM 212 Business Communication

COMM 215 Business Statistics

COMM 217 Financial Accounting

Semester 2

COMM 220 Analysis of Markets

COMM 222 Organizational Behaviour and Theory

COMM 224 Marketing Management

COMM 225 Production and Operations
Management

2nd Year

Semester 1

COMM 301 Management Information Systems

COMM 305 Managerial Accounting

COMM 308 Introduction to Finance

Semester 2

COMM 315 Business Law and Ethics

COMM 320 Entrepreneurship

3rd Year

COMM 401 Strategy and Competition

JOHN MOLSON SCHOOL OF BUSINESS

Program	Major	Minor	Certificate
Accountancy	X		
Business Studies		X ¹	X ¹
Economics	X	X	
Electronic Business Systems		X	
Entrepreneurship and Small Business Management		X	
Finance	X	X	
Financial Accountancy		X	
Human Resource Management	X	X	
International Business	X	X	
Management	X	X	
Management Information Systems	X	X	
Managerial Accountancy		X	
Marketing	X	X	
Operations Management	X	X	

Students will indicate their preferred field of concentration at the time of application for entry. It should be noted that students may change their Major and/or Minor after completion of their first year of study.

¹*This program is not open to students registered in a program leading to the undergraduate degree of Commerce or Administration.*

Students may transfer into the Certificate program up to 12 credits earned in an incomplete degree or Certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

61.22.1
Academic
Performance
Regulations

NOTE: The GPA regulations apply to all students, including those with Visiting status, registered in programs offered by the John Molson School of Business. This also includes the Minor in Business Studies and Certificate programs.

The objectives of these regulations are:

- to ensure that the School of Business can certify that all of its graduates are qualified to enter their profession;
- to ensure that students can, with the assistance or intervention of the School of Business, assess themselves objectively, and plan programs of study designed to meet their individual needs.

Annual Weighted Grade Point Average (WGPA)*

Requirements and Consequences

*See §16.3.10, II for definition of Annual WGPA.

Acceptable standing requires that a student obtain an Annual WGPA of at least 2.00.

NOTE: Although a "C-" grade (1.70 grade points) is designated as Satisfactory in §16.3.3, a WGPA of 2.00 is required for acceptable standing.

Students in acceptable standing may proceed subject to the following condition: any failed required course must be repeated.

Conditional standing results when a student obtains an Annual W GPA of less than 2.00, but at least 1.50. A student is not permitted to obtain two consecutive conditional standing assessments. Students in conditional standing may not write supplemental examinations but may proceed subject to the following conditions:

- a) they must receive academic counselling from the appropriate member of the Dean's Office;
- b) they must repeat successfully all courses in which failing grades were obtained, or replace them by alternatives approved by the Dean's Office;
- c) in no case will the number of credits exceed 15 per term for full-time students and six per term for part-time students;
- d) they must obtain acceptable standing at the time of their next assessment.

Failed standing results when a student obtains an Annual W GPA of less than 1.50, or conditional standing in two consecutive periods of assessment.

Failed students may not write supplemental examinations.

Failed students are required to withdraw from their program for a minimum period of one year.

Students who are in failed standing for a second time will be dismissed from the University for a longer period of time. In subsequent years, should they wish to return to university studies, they must contact the Office of the Registrar for information concerning conditions and procedures for seeking readmission. Decisions of the relevant authority in the Faculty to which application is made are final.

Failed students who are dismissed may apply for readmission through the Dean's Office of the Faculty to which they wish to be readmitted. If readmitted, they will be placed on academic probation and restricted to a maximum of six credits per semester. They must return to acceptable standing at the time of their next assessment. Other conditions will be determined at the time of readmission.

Graduation Requirements

Students must satisfy all course requirements and be in acceptable standing.

The standings of potential graduates who have attempted less than 12 credits since their last assessment are determined on the basis that these credits constitute an extension of the last assessment period.

Students who fail to meet acceptable standing but meet conditional standing will have the following options:

- a) register for 12 credits and meet the criteria for acceptable standing;
- b) register for fewer than 12 credits. In this case, standing will be determined on the basis that these credits constitute an extension of the last assessment period.

NOTE: Dean's Office is to be understood as being the appropriate member of the Dean's Office, normally the Associate Dean, Student Affairs, or delegate.

61.30 GENERAL INFORMATION

Failures/Prerequisites

Students are cautioned that a failure in a first-term course will prohibit them from proceeding to a second-term course for which the first is a prerequisite. Students who find themselves in this position must drop the second-term course and register in a section of the failed course, if available.

There will be a course-change period at the beginning of each term, at which time students falling in the above category must make arrangements for the necessary course changes.

**Students who are registered for a course in which they do not have the appropriate prerequisite must adjust their registration accordingly. The Office of the Associate Dean reserves the right to deregister those students who do not adhere to academic regulations.*

NOTE: THERE ARE NO SUPPLEMENTAL EXAMINATIONS IN THE JOHN MOLSON SCHOOL OF BUSINESS.

Bilingualism

The business community, as well as governments, now express a preference for university graduates who are bilingual. We, therefore, advise all students to take advantage of the opportunities available during their years at this University to ensure that they are bilingual when they present themselves for employment upon graduation.

61.35 JOHN MOLSON SCHOOL OF BUSINESS COURSES

The following core courses provide a format in which topics of faculty-wide interest are considered:

Courses

COMM 210 Contemporary Business Thinking (3 credits)

Prerequisite: COMM 212 previously or concurrently; ECON 201 or 203 or equivalent previously or concurrently. This course exposes students to an in-depth reading of several contemporary business books. It aims to incite students to develop a critical perspective on business literature. Students are also encouraged to explore popular and influential business writing; expose and evaluate the central ideas for scope, relevance, and managerial utility.

NOTE: It is recommended that part-time students complete this course, along with COMM 212, as early in their program as possible.

COMM 212 Business Communication (3 credits)

Prerequisite: INTE 290 or COMP 201 previously or concurrently. This course focuses on the principles and techniques of clear, concise, and effective, written and oral communication, especially as they apply to business. The formal, grammatical, and stylistic elements of written and oral business communication are emphasized. In addition, students are instructed in and experience the use of audiovisual means of communication.

NOTE: It is recommended that part-time students complete this course, along with COMM 210, as early in their program as possible.

NOTE: Students who have received credit for BUSC 300 may not take this course for credit.

COMM 215 Business Statistics (3 credits)

Prerequisite: INTE 290 or COMP 201 previously or concurrently; MATH 208 or equivalent, MATH 209 or equivalent. This course introduces the fundamentals of statistics as applied to the various areas of business and administration. Topics covered include techniques of descriptive statistics, basic theory of probability and probability distributions, estimation and hypotheses testing, chi-square tests in contingency table analysis and for goodness-of-fit, and simple linear regression and correlation.

NOTE: Students who have received credit for DESC 243 may not take this course for credit.

COMM 217 Financial Accounting (3 credits)

Prerequisite: COMM 210 previously or concurrently. This course examines the theory and practice involved in measuring, reporting, and analysing an organisation's financial information. Concepts underlying financial statements are discussed, with an emphasis on generally accepted accounting principles. Disclosures/requirements concerning financial statements as well as information needs of decision-makers are introduced.

NOTE: Students who have received credit for ACCO 213 may not take this course for credit.

COMM 220 Analysis of Markets (3 credits)

Prerequisite: COMM 210 or MANA 266; COMM 215 or DESC 243; ECON 201 or equivalent; ECON 203 or equivalent previously or concurrently. This course provides a general perspective on the history, operation and inter-relationships between Canadian and international product, labour and financial markets. Specifically, students will be introduced to issues of fundamental importance to today's managers and entrepreneurs such as changes in structure and competitiveness in these markets in response to government policies, the determination and behaviour of interest rates, inflation, market integration, and the role and function of financial intermediation. It further provides students with the knowledge of the role and impact of regulation and other government interventions in these markets.

COMM 222 Organizational Behaviour and Theory (3 credits)

Prerequisite: COMM 210, 212. This course is designed to provide students with an opportunity to study individual behaviour in formal organizations. Through theoretical case and experiential approaches, the focus of instruction progressively moves through individual, group and organizational levels of analysis. Topics in the course include perception, learning, personality, motivation, leadership, group behaviour, and organizational goals and structure.

NOTE: Students who have received credit for MANA 340 may not take this course for credit.

COMM 224 Marketing Management (3 credits)

Prerequisite: COMM 210; COMM 212 previously or concurrently. This course is an introduction to the managerial concepts and practices of marketing from the perspective of an organization and its products and services. The process of developing a marketing strategy and all of the components thereof is examined along with their interrelationships. Readings and cases are used to help students apply these concepts to realistic marketing problems in a host of business settings, including small business and international environments.

NOTE: Students who have received credit for MARK 213 or 350 may not take this course for credit.

COMM 225 Production and Operations Management (3 credits)

Prerequisite: COMM 210, 212; COMM 215 previously or concurrently. This course is an introduction to contemporary operational issues and techniques in the manufacturing and service sectors. Among the topics covered are: operations strategy, forecasting, materials' manage-

ment, total quality management, time-based competition, and minimal manufacturing. Mathematical modelling in resource allocation is also introduced. Cases and computer-aided quantitative tools for decision-making are used throughout the course with an emphasis on the interactions between production/operations management and other business disciplines.
NOTE: Students who have received credit for DESC 250 may not take this course for credit.

COMM 301 *Management Information Systems* (3 credits)

Prerequisite: COMM 210, 212; COMM 217, 222 previously or concurrently. The objective of this course is to provide students with an understanding of the role of computer-based information systems in business organizations and the analytical skills required to work with management information systems. This course will also help to equip students with the ability to apply information technologies to a variety of business problems.
NOTE: Students who have received credit for DESC 222 may not take this course for credit.

COMM 305 *Managerial Accounting* (3 credits)

Prerequisite: COMM 217. This course covers the development of accounting information to assist management in carrying out its functions effectively and efficiently. Concepts and techniques for planning, performance evaluation, control, and decision-making are introduced. New developments are addressed with a focus on contemporary business issues and real-world applicability of management accounting concepts and techniques.
NOTE: Students who have received credit for ACCO 218 may not take this course for credit.

COMM 308 *Introduction to Finance* (3 credits)

Prerequisite: COMM 217, 220. This course provides a general understanding of the fundamental concepts of finance theory as they apply to the firm's long-run short-run financing and investment decisions. Building on the objective of firm value maximization, students will become familiar with the conceptual issues underlying risk and return relationships and their measurements, as well as the valuation of financial securities. They will also learn the concept of cost of capital, its measurement, and the techniques of capital budgeting as practised by today's managers. Students will be introduced to the basic issues surrounding the firm's short- and long-term funding decisions and its ability to pay dividends. Management of the firm's accounts receivable and accounts payable, and the level of working capital are also presented.
NOTE: Students who have received credit for FINA 214 or 315 may not take this course for credit.

COMM 315 *Business Law and Ethics* (3 credits)

Prerequisite: COMM 308. This course will allow students to develop a degree of familiarity with the important ethical and legal aspects of business and to become more aware of and comfortable with resolving ethical and legal components of their decision-making and with distinguishing right from wrong business behaviour.
NOTE: Students who have received credit for MANA 475 may not take this course for credit.

COMM 320 *Entrepreneurship* (3 credits)

Prerequisite: COMM 224, 305, 308. This course emphasizes the entrepreneurial aspects of management that are required to create, develop, and sustain either a new business venture or a major project/initiative within an existing organization. The integrative nature of the course will require an understanding of each functional area of business. Students will have the opportunity to demonstrate the teamwork, leadership, communication, and the other skills stressed throughout the program.
NOTE: Students who have received credit for COMM 410 may not take this course for credit.

COMM 401 *Strategy and Competition* (3 credits)

Prerequisite: 45 credits in Commerce and Administration; COMM 315 and 320 previously or concurrently. This capstone course requires graduating students to demonstrate their ability to integrate the knowledge and skills they have acquired during their Commerce program. This course introduces the concepts of strategic management and competitive analysis. Emphasis is given to integrating concepts and ideas from the major functional areas such as marketing and finance to give a global perspective on decision-making and directing modern business enterprises. Lecture topics and case studies are selected to portray the nature of the strategic process and the dynamics of competition in a variety of contexts. Attention is also given to the issues of social responsibility, ethics, and personal values. In this context, we also examine the connection between organizational strategy and the physical environment. Finally, cases and assignments which require an analysis of organizational improvement strategies and new organizational structures are selected.
NOTE: Students who have received credit for COMM 310 or MANA 460 may not take this course for credit.

COMM 499 *Seminar Course* (3 credits)

Prerequisite: To be determined each academic term. This course will enable students, on an individual basis, to further focus on a specialized topic within their discipline.

61.40

ACCOUNTANCY

<i>Faculty</i>	<i>Associate Professor and Chair of the Department</i> GEORGE K. KANAAN <i>Professors</i> C. DEREK ACLAND MICHEL MAGNAN <i>Professor Emeritus</i> LAWRENCE BESSNER <i>Associate Professors</i> IBRAHIM M. ALY HENRY J. DAUDERIS CHARLES DRAIMIN KELLY F. GHEYARA MANMOHAN RAI KAPOOR BURYUNG LEE JUAN J. SEGOVIA HUSSEIN WARSAME	<i>Assistant Professors</i> EMILIO BOULIANNE MAUREEN P. GOWING JOUNG KIM GEORGE LOWENFELD DOMINIC PELTIER-RIVEST <i>Lecturers</i> PATRICK DELANEY GAIL FAYERMAN MAJIDUL ISLAM TARA RAMSARAN SANDRA M. ROBINSON WENDY NADINE ROSCOE PIERRE TAILLEFER STEVEN TAMAS
<i>Location</i>	<i>Sir George Williams Campus</i> Annex GM, Room: 600-13 (514) 848-2759	
<i>Department Objectives</i>	<p>The Department of Accountancy is dedicated to providing leadership in accounting education through a strong commitment to excellence in teaching and leadership in the discovery and dissemination of accounting knowledge. It acts as a bridge between the University and business, government, and professional accounting as they relate to various facets of accountancy at the undergraduate and graduate levels.</p> <p>The Department continuously strives to provide leadership and scholarship that are recognized provincially, nationally, and internationally by offering unique, creative, innovative, and "lifetime-learning" opportunities. The Department is responsive to its diverse constituencies and both nourishes and preserves an equitable, just, and non-discriminatory environment.</p>	
<i>Programs</i>	27 Major in Accountancy 3 ACCO 310 3 ACCO 320 3 ACCO 330 3 ACCO 340 3 ACCO 400 12 additional credits offered by the Department	12 Minor in Financial Accountancy 3 ACCO 310 3 ACCO 320 6 additional credits offered by the Department 12 Minor in Managerial Accountancy 3 ACCO 330 3 ACCO 430 6 additional credits offered by the Department
<i>Accountancy Co-operative Program</i>	<i>Director</i> SANDRA M. ROBINSON, <i>Lecturer</i> (514) 848-2748 The Accountancy Co-operative program is offered to students who are enrolled in the BComm program and are majoring in Accountancy. Students interested in applying for the Accountancy co-op should refer to §24 where a full description of the admission requirements is provided. Academic content is identical to that of the regular program, but six Study terms are interspersed with four Work terms.	

ACCO 220 Financial and Managerial Accounting (3 credits)

This course provides an introduction to accounting principles underlying the preparation of financial reports with an emphasis on the relationship between accounting information and production decisions. It examines the relationship between costs, production volume, and profit, as well as the practical benefits of standard costs for planning and control purposes. The role of accounting information in various manufacturing decisions is also highlighted.

NOTE: This course would be useful to Engineering students.

NOTE: Commerce and Administration students may not take this course for credit.

NOTE: Students who have received credit for ACCO 213, 218, 230, 240 may not take this course for credit.

ACCO 230 Introduction to Financial Accounting (3 credits)

This course provides an introduction to accounting concepts underlying financial statements of organizations. It focuses on the analysis, measurement, and reporting of business transactions to users of financial statements. It also examines the uses and limitations of accounting information for investment and credit decisions.

NOTE: Commerce and Administration students may not take this course for credit.

NOTE: Students who receive a grade of "C" or better may be exempt from COMM 217.

NOTE: Students who have received credit for ACCO 213 or 220 may not take this course for credit.

ACCO 240 Introduction to Managerial Accounting (3 credits)

Prerequisite: ACCO 213 or 230. This course examines the role of accounting information for decision making, and focuses on concepts and techniques used in planning operations, controlling activities, and evaluating managerial performance. New developments are addressed with a focus on contemporary business issues and real-world applicability of management accounting concepts and techniques.

NOTE: Commerce and Administration students may not take this course for credit.

NOTE: Students who receive a passing grade may be exempt from COMM 305.

NOTE: Students who have received credit for ACCO 218 or 220 may not take this course for credit.

ACCO 310 Intermediate Accounting I (3 credits)

Prerequisite: COMM 305 or ACCO 218 previously or concurrently. This course extends the material covered in the first financial accounting course, integrating the previous work with more advanced accounting theory and application. Intensive study is made of the theory and practice of external financial reporting by business entities, focusing on

concepts and procedures underlying the measurement of assets and the determination of income.

NOTE: Students who have received credit for ACCO 323 may not take this course for credit.

ACCO 320 Intermediate Accounting II (3 credits)

Prerequisite: ACCO 310 or 323. This course continues the intensive study of ACCO 310, with particular emphasis on accounting for liabilities, shareholders' equity, and other related topics such as earnings per share, pension accounting, and accounting for income taxes.

NOTE: Students who have received credit for ACCO 326 may not take this course for credit.

ACCO 330 Cost and Management Accounting (3 credits)

Prerequisite: ACCO 218 or COMM 305. This course provides an examination of the techniques, systems, and procedures applicable to the managerial use of accounting information for planning, decision-making, and control. Topics include cost accumulation and allocation, product and process costing, flexible budgeting and variance analysis, evaluation of managerial performance, and transfer pricing.

NOTE: Students who have received credit for ACCO 303 may not take this course for credit.

ACCO 340 Income Taxation in Canada (3 credits)

Prerequisite: ACCO 213 or COMM 217. This course examines the federal income tax structure, including the taxation of employment, business, property income, and capital gains of individuals and corporations.

NOTE: Students who have received credit for ACCO 441 may not take this course for credit.

ACCO 345 Managerial Tax Planning (3 credits)

Prerequisite: ACCO 213 or COMM 217. This course develops an understanding of the role of taxes in business decision processes. It presents a conceptual framework that integrates tax and nontax business issues without resorting to the technical details of the Income Tax Act. The emphasis is on applying key concepts to all planning issues, whether they are personal or corporate, domestic or international. The topics covered include multi-period tax planning, implicit taxes and market equilibrium, tax arbitrage, and international tax planning.

NOTE: Students in the Accountancy Major may not take this course for credit.

NOTE: This course would be useful for students in Finance and Management.

ACCO 350 Accounting Information Systems (3 credits)

Prerequisite: DESC 222 or COMM 301; ACCO 218 or COMM 305; ACCO 310 or 323. This course examines the role and function of computerized accounting information systems in recording, processing, and storing accounting

data necessary for planning, decision-making, and control of organizations. Theory and practice are combined in a case-study approach which includes "hands-on" experience with computer software.

NOTE: Students who have received credit for ACCO 414 may not take this course for credit.

NOTE: This course would be useful for students in Management Information Systems.

ACCO 355 Analysis of Financial Statements (3 credits)

Prerequisite: ACCO 218 or COMM 305; FINA 214 or COMM 308. This course explores the usefulness and limitations of financial statements for investment and credit decisions. It focuses on the interpretation of the information contained in financial statements which reflect the economic characteristics of the firm and its strategic business decisions. Instruments and techniques for financial statement analysis are discussed and applied to case studies and actual companies.

NOTE: Students in the Accountancy Major may not take this course for credit.

NOTE: This course would be useful for students in Finance and Management.

ACCO 400 Accounting Theory (3 credits)

Prerequisite: ACCO 320 or 326. This course examines the theoretical foundations of the contemporary approach to financial reporting, and the political and pragmatic considerations in the development of the conceptual framework underlying current accounting standards. Alternative theories of accounting are discussed and controversial areas are emphasized.

NOTE: Students who have received credit for ACCO 461 may not take this course for credit.

ACCO 410 Governmental and Not-for-Profit Accounting (3 credits)

Prerequisite: ACCO 320 or 326. This course introduces the theory and concepts that underlie the financial accounting, control, and reporting in not-for-profit organizations. General concepts and principles will be illustrated by comparing the practices of selected not-for-profit organizations, including local and federal governments and universities, with authoritative standards.

ACCO 420 Advanced Financial Accounting (3 credits)

Prerequisite: ACCO 320 or 326. This course examines the theory and practice of accounting for intercorporate investments, business combinations, consolidation of financial statements, disaggregated information, and foreign currency transactions and operations. The course also examines accounting for partnerships.

NOTE: Students who have received credit for ACCO 335 may not take this course for credit.

ACCO 430 Advanced Management Accounting (3 credits)

Prerequisite: ACCO 303 or 330. This course

expands on the problem-solving and decision-making tools covered in ACCO 330, and develops the student's ability to select and apply appropriate managerial accounting techniques to cases involving actual companies. This integrative course emphasizes the development of analytical skills needed to solve managerial problems, and covers recent developments in management accounting.

NOTE: Students who have received credit for ACCO 422 may not take this course for credit.

ACCO 440 Advanced Taxation (3 credits)

Prerequisite: ACCO 340 or 441. This course extends the coverage of ACCO 340 with an examination of specialized topics in personal and corporate income tax, including a detailed review of the taxation of corporations, tax planning, and the tax effects of various theoretical and practical business combinations.

NOTE: Students who have received credit for ACCO 442 may not take this course for credit.

ACCO 450 Financial Auditing (3 credits)

Prerequisite: ACCO 320 or 326 previously or concurrently. This course examines auditing concepts and methodology underlying audits of financial statements in terms of current practice and standards. It emphasizes the audit process and the role of the public accountant in expressing an opinion on the financial statements of an organization.

NOTE: Students who have received credit for ACCO 429 or 432 may not take this course for credit.

ACCO 460 Operational Auditing (3 credits)

Prerequisite: ACCO 320 or 326 previously or concurrently. This course examines the concepts and techniques of operational auditing. It emphasizes the audit of operations within the organization. Topics include comprehensive auditing, management control and systems development, computer-based auditing techniques, documentation and communication of audit findings.

ACCO 470 Special Topics in Accounting (3 credits)

Prerequisite: Written permission of the Department. This course is intended to complement accounting courses taken previously or concurrently at the senior level. It provides an opportunity for more intensive study in one or more specific topics in accounting.

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

ACCO 480 Financial Reporting and Analysis (3 credits)

Prerequisite: ACCO 335 or 420. This course integrates the material covered in prior financial accounting courses. It emphasizes a user perspective of financial reporting, and focuses on the interpretation and analysis of information

contained in financial statements and related disclosures. It provides an understanding of the usefulness and limitations of financial accounting information for investment and credit decisions. Models and techniques used in financial statement analysis are applied to case studies and actual companies.

ACCO 490 Seminar in Taxation (3 credits)

Prerequisite: ACCO 440 or 442. This course provides an in-depth coverage of taxation

issues. It emphasizes the development of professional skills in the application of tax principles and concepts to the solution of complex tax problems facing individuals, trusts, and corporations.

NOTE: Students who have received credit for ACCO 471A may not take this course for credit.

Faculty	Associate Professor and Chair of the Department JAMSHID ETEZADI-AMOLI	FASSIL NEBEBE MAHESH SHARMA JERRY TOMBERLIN
	Professors DALE DOREEN SURESH KUMAR GOYAL GREGORY E. KERSTEN TAK KWAN MAK AHMET SATIR	Assistant Professors EL SAYED ABOU-ZEID BOUCHAIB BAHLI ANNE BEAUDRY ANNE-MARIE CROTEAU KEVIN LAFRAMBOISE RAAFAT SAADE AHMAD SHAFAT RUSTAM VAHIDOV
	Associate Professors CLARENCE BAYNE JEAN-MARIE BOURJOLLY MERAL BÜYÜKKURT DENNIS KIRA DANIELLE MORIN	Lecturers BORIS BARAN GERALDINE KORDA
Location	Sir George Williams Campus Annex GM, Room: 209-9 (514) 848-2980	
Department Objectives	<p>The Department of Decision Sciences and Management Information Systems strives to equip its students with an integrated set of decision-making skills.</p> <p>The Operations Management Major aims to develop expertise in all important aspects of managerial statistics, operations research, and production/operations management. It prepares graduates for careers that require skills in the collection and analysis of relevant data for decision-making with respect to the effective and efficient management of human resources, capital and time.</p> <p>The Management Information Systems Major aims to develop expertise in all important aspects of the development, use, and management of information systems. It prepares graduates for careers in information systems analysis and design, database design and administration, as well as management of information technology.</p> <p>The objective of the Minor in Electronic Business Systems is to augment students' education with the knowledge of the most current information technologies and electronic business topics. This exposes them to a broad and ever-changing mix of technologies, programming languages and tools, and teaches the skills and learning strategies necessary to work in E-business application development teams in both large and small organizations or consulting firms.</p>	
Programs	<p>24 Major in Operations Management 15 DESC 325, 335, 361, 378, 425 9 Chosen from DESC 375*, 385, 390*, 445*, 477*, 481, 490*, 492* *Not all courses will be offered in each academic year.</p> <p>12 Minor in Operations Management 12 Chosen from DESC 325, 335, 361, 378, 425</p>	<p>24 Major in Management Information Systems 18 DESC 381, 382, 384, 481, 487, 495 3 Chosen from COMP 218, 248 3 Chosen from DESC 385, 387, 496</p> <p>12 Minor in Management Information Systems 12 DESC 381, 382, 481, 495</p> <p>12 Minor in Electronic Business Systems 12 Chosen from DESC 387, 388, 389, 488, 489</p>

Decision Sciences
and Management
Information Systems
Co-operative
Program

Director
MERAL BÜYÜKKURT, Associate Professor
(514) 848-2741

The Decision Sciences and Management Information Systems co-operative program is offered to students who are enrolled in the BComm program and are majoring in Management Information Systems. Students interested in applying for the Management Information Systems co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular program, but six Study terms are interspersed with four Work terms.

Students are supervised personally and must meet the requirements specified by the John Molson School of Business and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Management Information Systems co-op committee, which includes the student's advisers.

Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

Courses

DESC 325 *Operational/Tactical Issues in Operations Management* (3 credits)

Prerequisite: COMM 225. Operations management issues and problems with short-medium term implication will be studied in this course. Among the topics covered are: production planning and control, scheduling, materials handling, warehousing, purchasing, and inventory management. Both modelling and managerial aspects will be dealt with. Manufacturing analysis and enterprise resources planning software will be used to demonstrate the integration of the topics covered and their practical applications.

NOTE: Students who have received credit for DESC 350 or MANA 345 may not take this course for credit.

DESC 335 *Quality Management* (3 credits)

Prerequisite: COMM 215 or DESC 244; COMM 225 or DESC 250. Operational issues in managing quality in manufacturing and service operations will be dealt with. The main focus of the course is on the technical issues in quality management aimed at developing hands-on knowledge. Topics such as Quality Management Philosophies, Total Quality Management, Process Management and Continuous Improvement, Quality Management Evaluation and Assessment (including ISO certification), Quality Assurance and Control (including Statistical Process Control, Reliability) will be covered. Software packages will be used for analysing problems with real-life data.

DESC 361 *Management Science Models for Operations Management* (3 credits)

Prerequisite: COMM 225 or DESC 250. This course deals with application of optimization models (such as linear programming, network models, integer programming, quadratic programming, and waiting line models) for various operations management scenarios dealing with human, physical, and financial resources planning. The course focuses on mathematical modelling

issues and interpretation of solution through the use of optimization software packages.

NOTE A/See §200.2

DESC 375 *Survey Design and Analysis* (3 credits)

Prerequisite: COMM 215 or DESC 244. This course deals with the design and execution of surveys and treatment of data consisting of measurements of several variables. Topics include development of research problems, sample design, survey data analysis, and elementary multivariate techniques. Students are required to carry out a project individually or in small groups. Substantial use is made of statistical software on mainframe and/or microcomputers. *NOTE A/See §200.2*

DESC 378 *Statistical Models for Business Research* (3 credits)

Prerequisite: COMM 215 or DESC 244. This course is intended to give the student a foundation in data analysis using linear models, with emphasis on applications in business, administration, and economics. Topics include regression modelling with several variables; one- and two-factor analysis of variance; time series analysis and forecasting. The course is applied in nature with a focus on real-life data analysis using statistical software packages.

NOTE A/See §200.2

DESC 381 *Introduction to Business Computer Programming* (3 credits)

Prerequisite: COMM 301 or DESC 222. The objective of this course is to provide students with the skills needed to develop computer-based applications. To this end, students will first learn fundamental software development techniques that will enable them to solve business information-processing problems, using both procedural and non-procedural approaches. They will then apply these concepts and techniques by developing business applications in a contemporary programming language such as Visual Basic. *NOTE A/See §200.2*

DESC 382 Database Management
(3 credits)

Prerequisite: COMM 301 or DESC 222. This course introduces students to the management of data in a corporate environment. Topics include data management, elementary data modelling, physical structures for representing business data, file organization, data dictionaries, file design, database administration, and issues in documentation. Use is made where feasible of professional data management software to illustrate course concepts. *NOTE A/See §200.2*

DESC 384 Business Data Communications
(3 credits)

Prerequisite: COMM 301; COMP 218 or 248. This course will provide a comprehensive introduction to the principles and techniques of business data communications. The content is directed towards the business student who desires a technical overview of the concepts of data transmission and methodologies employed in designing and managing local area and regional communications networks.
NOTE: Students who have received credit for DESC 486 may not take this course for credit.

DESC 385 Decision Support Systems
(3 credits)

Prerequisite: COMM 301 or DESC 222. New developments in information technology such as data bases, fourth-generation languages, and artificial intelligence have changed the nature of traditional business decision support systems (DSS). This course starts by examining the human decision-making process and categorizes decision tasks. It then evaluates the requirements for effective user-machine decision making. The impact of the new end-user computing tools is considered in relation to DSS design.
NOTE: Students who have received credit for DESC 493 may not take this course for credit.

DESC 387 Fundamentals of Electronic Business (3 credits)

Prerequisite: COMM 301. This is an introductory course designed to familiarize students with the fundamental, technical, and managerial issues concerning electronic business. Topics covered include E-business strategies and models; strategic role of electronic commerce technologies; underlying technologies; knowledge management; intelligent systems; customer relationship management; trust, money and markets; new organizational forms and virtual enterprises; security and ethical issues. The learning occurs through the study and discussion of conceptual reading material and analysis.
NOTE: Students who have received credit for this topic under a DESC 490 number may not take this course for credit.

DESC 388 Systems Development Methodologies for Electronic Business (3 credits)

Prerequisite: COMM 301. This course focuses on

the management of data in a corporate database environment and the most recent developments in system analysis and design methodologies. Topics include feasibility analysis, systems analysis, process modelling, data modelling, database design, database technology, database implementation utilizing relational software, database administration, client-server/distributed database environment, and Web-based technologies. Teaching methods used include lectures on theory and tools, exercises assigned to reinforce the theory and tools, and a term project involving practical experience on analysis of a real business information system.
NOTE: Students who have received credit for DESC 382 or 481 may not take this course for credit.
NOTE: MIS Majors or Minors may not take this course for credit.

DESC 389 Electronic Business Supply Chain (3 credits)

Prerequisite: COMM 225; DESC 387 previously or concurrently. This course examines the strategies and processes for dealing with all partners in the chain of service or goods provision, from initial input through final output and consumption. Extensive laboratory experience provides students with the basic concepts in the use of tools for enterprise resource-planning (ERP) and decision support systems. Students learn how the principles of supply-chain management integrate into the "real-time" environment of E-business, and examine case studies of such implementations. Latest software and technology are discussed and examples demonstrated. This is a combined lecture and technology hands-on course. The issues of supply-chain management are covered during class lectures and discussions. In laboratory sessions, students learn the basics of an ERP software package, as well as undertake an analysis of material from a company database.
NOTE: Students who have received credit for this topic under a DESC 490 number may not take this course for credit.

DESC 390 Production/Manufacturing Management (3 credits)

Prerequisite: COMM 225 or DESC 250. It is the production function of the enterprise that gives us the products and services that we sell. In this course, we attempt to help management guide and control this area. Topics include government programs and incentives, health and safety regulations, material handling, plant location and layout, and production incentive systems.
NOTE: Students who have received credit for MANA 345 may not take this course for credit.

DESC 425 Strategic Issues in Operations Management (3 credits)

Prerequisite: DESC 325 or 350. Issues related to product/service and process strategies, management of technology, capacities management, facilities planning, and cycle time man-

agement will be dealt with. Also, issues in contemporary operations management such as minimalistic manufacturing, activity/target-based costing, synchronous manufacturing and business process-re-engineering will be covered. The focus and examples would be both on service, as well as on manufacturing operations.

DESC 445 *Statistical Software for Decision Making* (3 credits)

Prerequisite: DESC 378. This course presents a thorough introduction to widely used statistical software systems for data management (information storage and retrieval), data modification and programming, file handling, and procedures for statistical analysis and reporting. It also covers current software on mainframe and/or microcomputers, and covers special features such as graphics and macro languages. The course will be offered in computer labs and will expose the students to the use of the software on different platforms and different operating systems.

DESC 477 *Managerial Forecasting* (3 credits)

Prerequisite: DESC 378 or equivalent. This course presents the foundations of applied time-series analysis for managerial forecasting. It includes forecasting methods and objectives, fundamental concepts in time-series analysis, models for seasonal time-series, models for nonstationary time-series, Box and Jenkins methods, forecast evaluation. This is an applied course with a heavy emphasis on actual data analysis using statistical computer packages on mainframe and/or microcomputers.

NOTE A/See §200.2

DESC 481 *Information Systems Analysis* (3 credits)

Prerequisite: COMM 301 or DESC 222. This course covers the first phase of the systems development life cycle, which culminates in the systems proposal. Topics include the preliminary survey, analysis of existing systems and identification of deficiencies, the development of functional specifications, feasibility and cost/benefit analysis and development of a recommended course of action. In addition, various diagramming techniques are examined.

NOTE A/See §200.2

DESC 482 *Information Systems Design* (3 credits)

Prerequisite: DESC 382, 481. Methods and procedures for designing business information systems are discussed. Topics include data and process modelling, preparing screen and report layouts using data dictionaries and documentation within the design process. A comprehensive case study using current computer-aided technologies demonstrates various design concepts.

NOTE A/See §200.2

NOTE: To ensure proper succession in the thought process, students are strongly

recommended to enrol in this course in the term immediately following the successful completion of DESC 481.

DESC 484 *Software Application Development* (3 credits)

Prerequisite: DESC 482. Students will implement the applications they have analysed and designed in DESC 481 and 482. New development tools and languages will be employed in this implementation effort.

NOTE: Students who have received credit for DESC 383 may not take this course for credit.

DESC 487 *Object-Oriented System Development* (3 credits)

Prerequisite: DESC 481; COMP 218 or 248. This course is an introduction to the concepts, techniques, and methodologies of the Object-Oriented (OO) approach to information system development. Fundamental concepts of objects models will be followed by a study of various OO methods for system analysis and design. Finally, a comparative survey of several contemporary OO implementation technologies such as object languages, object databases, and distributed object architecture will be presented. Students will then use one of these methodologies to develop a small-scale business system.

DESC 488 *Web Site Construction and Management* (3 credits)

Prerequisite: DESC 387; DESC 388 (for non-MIS Majors) or DESC 382 and 481 (for MIS Majors). This course is a general overview of Web site design and management. Topics include a general introduction to the World Wide Web and the Hypertext Transfer Protocol (HTTP); HTML scripting (including tables, frames, and cascading style sheets); JavaScript programming (document object model; input validation, graphics tricks); Perl programming (overview; scalar, array and hash data types; control structures, regular expressions; basic I/O; file access references and object-oriented programming); server configuration (types of servers; basic configuration parameters); CGI scripting (CGI basics, secure programming); and database integration. The major project involves the development of an E-commerce site.

NOTE: Students who have received credit for this topic under a DESC 490 number may not take this course for credit.

DESC 489 *Electronic Business Implementation* (3 credits)

Prerequisite: DESC 387; DESC 388 (for non-MIS Majors) or DESC 382 and 481 (for MIS Majors). Electronic commerce describes the ways in which business activities take place over networks. It is a process of marketing, evaluating, procuring, selling, buying, and also producing goods, services, and information. E-commerce changes the traditional systems used for purchasing, sales, operations and marketing. Topics covered include E-commerce architectures and implementation

strategies; E-commerce systems components; system design; creating and managing content; transaction processing; back office systems; cryptography and security; and payment systems. Teaching methods consist of a series of lectures, case discussion, tutorials introducing several technologies for the development of Web-based systems (including HTML, XML, CGI and CSS, and basics of Unix/Linux). The major project involves the development of an E-commerce site developed for a specific business customer. *NOTE: Students who have received credit for this topic under a DESC 490 number may not take this course for credit.*

DESC 490 *Special Topics in Decision Sciences and Management Information Systems* (3 credits)

Prerequisite: Permission of the Department. This course allows for more intensive examination of one or more topics in production/operations management, operations research, business statistics or management information systems.

DESC 492 *Business Simulation* (3 credits)

Prerequisite: COMM 215 or DESC 244; COMM 225 or DESC 250. This course is intended to give an insight into using simulation technique for building realistic models of complex systems, and how to use these models to experiment with alternative system designs. Application areas will include manufacturing and production systems, transportation systems, health-care systems, government/public systems, and financial systems. A simulation language will be taught and application of animation will also be dealt with. *NOTE A/See §200.2*

DESC 495 *Information Systems Design and Implementation* (3 credits)

Prerequisite: DESC 381, 382, 481. The main objective of this course is to expose students to the concepts, tools, and techniques they need to transform the information system requirements, resulting from the system analysis phase, into system design specifications, and to transform

the information system design specifications, resulting from the system design phase, into a working system. Topics include data and process analysis and design to distribute data and activities into design units; development of database specifications, input/output design specifications, user interface specifications and structured program design specifications; system implementation activities; project repository. Besides the formal lectures, assigned exercises, workshop and in-class discussions, students will be asked to apply system design tools and techniques to a specific business application.

NOTE: Students who have received credit for DESC 482 or 484 may not take this course for credit.

DESC 496 *Management of Information Technology* (3 credits)

Prerequisite: DESC 481. This course focuses on the issues and management techniques involved in administering the activities of Information Technology (IT) resources in an organization. Issues include such things as management of IT professionals, development of project management systems, acquisition of hardware/software, organizational structure, planning processes and management control of IT resources. Although most of the course material applies to managing the operations function within the IT department, the emphasis is on the manager's role as designer, facilitator, and change agent in managing the development and implementation of computer-based information systems and in managing the evolving IT organization. A socio-technical perspective will be emphasized to ensure a balanced look at technical and people issues. Besides the formal lectures, assigned exercises, workshop and in-class discussions, students will be asked to apply their managerial and consulting skills to a specific business application.

NOTE A/See §200.2

NOTE: Students who have received credit for DESC 386 or 483 may not take this course for credit.

61.60

ECONOMICS

<i>Location</i>	<i>Loyola Campus</i> Centennial Building, 3rd Floor	<i>Sir George Williams Campus</i> Annex ER, Room: 100-1 (514) 848-3900
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<i>Programs</i>	For departmental information please see §31.080.	
	24 Major in Economics	12 Minor in Economics
	12 ECON 301, 302, 303, 304	6 ECON 318, 319
	12 ECON elective credits chosen at the 400 level	6 ECON elective credits chosen at the 300 level

61.70

FINANCE

Faculty	Professor and Chair of the Department LORNE SWITZER	LATHA SHANKER DOGAN TIRTIROGLU
	Professors MOHSEN ANVARI LAWRENCE KRYZANOWSKI STYLIANOS PERRAKIS Associate Professors ARSHAD AHMAD ABRAHAM BRODT RICHARD CHUNG ALAN HOCHSTEIN ARVIND JAIN GREGORY LYPNY	Assistant Professors SANDRA BETTON HARJEET BHABRA ARON GOTTESMAN ANDREY PAVLOV ANDREW K. PREVOST IAN RAKITA KHALED SOUFANI Lecturer JAY MANNADIAR
Location	Sir George Williams Campus Annex GM, Room: 300-55 (514) 848-2789	
Department Objectives	<p>The Department of Finance is committed to excellence in both research and teaching and has earned a solid reputation as a productive and research oriented academic unit. The Department's research activities include theoretical, empirical, and applied contributions — all aimed at furthering knowledge in the field. Its teaching activities cover a wide range of topics including corporate finance, investment, international finance, personal finance, optimization techniques, portfolio management, options and futures and fluctuations in security prices, exchange rates, and interest rates. Teaching effectiveness represents the cornerstone of the Department's teaching objectives. The Department's curriculum is a dynamic one which keeps up with current trends and innovations in the financial area. Department members have been recognized not only with Faculty Teaching Awards but also internationally by winning the 3M Teaching Fellowship Award.</p> <p>The Department has developed orientation and training programs with major corporations and financial institutions for its students. Through this type of external involvement, classroom teaching is effectively blended with the complexities of the real world thereby providing students not only with a more meaningful education but also with job opportunities.</p>	
Programs	24 Major in Finance 3 FINA 380 3 FINA 390 18 additional 400-level credits offered by the Department	12 Minor in Finance 3 FINA 380 3 FINA 390 6 additional 400-level credits offered by the Department
Finance Co-operative Program	<p>Director ARSHAD AHMAD, Associate Professor (514) 848-2928</p> <p>The Finance Co-operative program is offered to students who are enrolled in the BComm program and are majoring in Finance. Students interested in applying for the Finance co-op should refer to §24 where a full description of the admission requirements is provided. Academic content is identical to that of the regular program, but six Study terms are interspersed with four Work terms. Students will be under personal supervision and must meet the requirements specified by both the John Molson School of Business and the Institute for Co-operative Education in order to continue their studies in the co-op format.</p>	
Courses	FINA 320 Personal Financial Management (3 credits) Prerequisite: COMM 308 or FINA 315. This	course is designed to assist the student in making rational decisions when consulting in personal financial activities. Topics covered

include personal budgeting, spending pattern analysis, the proper use of credit, housing, investment (both traditional and modern), tax and retirement planning. Case studies are utilized when possible.

NOTE: Finance Majors and Minors may not take this course for credit towards their Major or Minor.

NOTE: Students who have received credit for FINA 424 may not take this course for credit.

FINA 330 *Applied Financial Management*
(3 credits)

Prerequisite: COMM 308 or FINA 315. The intent of this course is to develop skill in the identification and structuring of financial problems, in the selection of appropriate analytical techniques for their solution, and in the application of such techniques to decision-making in actual business situations. A variety of cases are used to achieve these objectives.

NOTE A/See §200.2

NOTE: Finance Majors and Minors may not take this course for credit towards their Major or Minor.

NOTE: Students who have received credit for FINA 430 may not take this course for credit.

FINA 350 *Introduction to Real Estate*
(3 credits)

Prerequisite: COMM 308 or FINA 315. This course deals with the central issues in real estate finance and investment. Topics in property management and real estate development which are covered include the organization of real estate markets, pricing, inflation, taxation, valuation methods, brokerage, ownership forms, and real estate law.

NOTE: Finance Majors and Minors may not take this course for credit towards their Major or Minor.

NOTE: Students who have received credit for FINA 491 may not take this course for credit.

FINA 370 *(also listed as IBUS 370)*
International Financial Management (3 credits)

Prerequisite: COMM 308 or FINA 315. This course is designed for students to acquire and demonstrate knowledge of the fundamental principles and issues in international financial management. It covers such topics as foreign exchange markets, exchange rate behaviour, structure and meaning of the international balance of payments, the functioning of fixed and floating exchange rate systems, short- and long-term investment and borrowing decisions, eurocurrency markets, foreign exchange risk management, and capital budgeting decisions for overseas investment. In sum, the topics are covered from the perspective of an individual who wishes to know how the international financial environment will affect the firm.

NOTE: Finance Majors and Minors may not take this course for credit toward their Major or Minor.

NOTE: Students who have received credit for FINA 467 or IBUS 370 or 469 may not take this course for credit.

FINA 380 *Theory of Finance* (3 credits)

Prerequisite: COMM 308 or FINA 315. This course provides a theoretical foundation upon which subsequent 400-level courses can be built. The course investigates the perfect capital markets paradigm in the context of how asset prices are related; how price relationships are grounded in utility theory; how formal asset pricing and related models, such as the Capital Asset Pricing Model, Arbitrage Pricing Theory, Option Pricing Model and the Miller-Modigliani Propositions, are implications of the paradigm; and how price relationships are changed in imperfect markets.

NOTE: Students who have received credit for FINA 440 may not take this course for credit.

FINA 390 *Theory of Capital Markets*
(3 credits)

Prerequisite: COMM 308 or FINA 315; FINA 380 or 440 previously or concurrently. This course extends the concepts covered in FINA 380 to a consideration of the way in which domestic and international capital markets operate. The course will survey the reasons why different markets have different institutional characteristics; how various markets are used by investors and financial managers; how prices in these markets behave; and what the implications of the functioning of various markets are for financial decision makers. *NOTE A/See §200.2*

NOTE: Students who have received credit for FINA 460 may not take this course for credit.

FINA 400 *Theory of Corporate Finance*
(3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course focuses on the application of the modern theory of finance to corporate decisions. Building upon the material covered in FINA 380 and 390, it examines the firm's investment and financial decisions under various economic and capital market conditions. More specifically, topics covered include cost of capital, capital structure decisions, evaluation and the application of the recently developed financial innovations in the debt market (e.g., swaps and junk bonds), mergers and acquisitions and leveraged buyout decisions, and dividend and equity management strategies.

NOTE A/See §200.2

NOTE: Students who have received credit for FINA 441 may not take this course for credit.

FINA 401 *Capital Budgeting* (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course provides an in-depth coverage of analytical techniques for rational capital investment decisions by corporations. Emphasis is placed on the assessment of investment choices within the overall strategic framework of the firm, and on the practical as well as the theoretical aspects of the decision process.

NOTE A/See §200.2

NOTE: Students who have received credit for FINA 417 may not take this course for credit.

FINA 402 *Short-Term Financial Management* (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course is concerned with the key aspects of short-term financial management. It begins with a brief coverage of the institutional environment facing the financial manager in Canada. A detailed coverage of sources for short-term borrowing and investments is presented. The structure of the Canadian financial system along with a description of the various methods of effecting payments as well as the clearing and settlement system are covered. Topics in overall liquidity management are briefly reviewed from a theoretical perspective. Traditional subjects in cash management, i.e., collections, disbursement and control, forecasting, company bank relationship, and short-term investment and borrowing are examined next. Such new developments as electronic data interchange and EFT/POS are also examined. The course also provides a coverage of trade credit both from a theoretical positive standpoint and normative viewpoint.

NOTE: Students who have received credit for FINA 420 may not take this course for credit.

FINA 410 *Investment Analysis* (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course is devoted to an examination of the investment decision, both from the viewpoint of the individual investor and the institutional investor. Valuation of different financial instruments such as treasury bills, bonds, common stocks, preferred stocks, options, warrants, convertibles, rights, futures both commodity and financial, mutual funds and pension funds, and the use of different instruments in various investment strategies such as investment, speculation, hedging, and arbitrage are examined. Techniques examined by analysts to pick investments such as fundamental analysis, technical analysis, and quantitative analysis are studied.

NOTE A/See §200.2

NOTE: Students who have received credit for FINA 452 may not take this course for credit.

FINA 411 *Portfolio Management* (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course focuses on modern investment theory and its application to the management of entire portfolios. Topics include: a) construction of optimal asset portfolios using techniques such as the single index model, b) extensions of the capital asset pricing model theory and tests example, the zero-beta model, c) criteria for evaluation of investment performance, d) active vs. passive portfolio management, e) portfolio insurance, f) market efficiency. A computer exercise is assigned to illustrate the application of the theory. *NOTE A/See §200.2*

NOTE: Students who have received credit for FINA 453 may not take this course for credit.

FINA 412 *Options and Futures* (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course on options and futures is a comprehensive analysis of the options and futures markets in North America. The student is introduced to the different markets for these instruments and their institutional details. The different types of options and futures currently trading are examined. The principles of valuation of futures and options, their use in risk management through hedging techniques and their use in speculative strategies are studied. Emphasis is placed on the analysis of financial options and futures.

NOTE: Students who have received credit for FINA 419 may not take this course for credit.

FINA 450 *Real Estate Investment and Finance* (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course deals with both the central issues in real estate finance and investment and with recent advances in the field. Students will be introduced to basic topics such as the organization of real estate markets, pricing, inflation, taxation, valuation methods, brokerage, ownership forms, and real estate law. In addition, they will study recent advances in finance as they apply to the concept of real estate valuation. Principles learned in FINA 380 and 390 and academic journals will serve as the basis for this aspect of the course.

NOTE: This course is offered for Finance Majors and Minors only. Non-Finance Majors and Minors must register for FINA 350.

NOTE: Students who have received credit for FINA 350 or 491 may not take this course for credit.

FINA 455 *Seminar in Finance* (3 credits)

This course is intended primarily for Finance Majors and Minors. It provides an opportunity for more intensive study in one or more specific topics of finance. The topic varies according to the special interests of the professor and the students. Enrolment is restricted and is subject to departmental approval. Students repeating FINA 455 register for credits under FINA 456. *NOTE A/See §200.2*

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

FINA 470 *International Finance* (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course examines the fundamental principles and issues in international finance. After examining the recent global evolution of the international financial environment, the institutional characteristics of foreign exchange and Eurocurrency markets will be studied. In addition, in-depth coverage of various issues relating to forecasting exchange rates, capital movements, and the international structure of interest rates is provided. Several mechanisms for managing international exchange and

financial risk will be assessed, including forwards, options, and futures on currencies as well as on interest rates. The course will conclude with a survey of recent international asset pricing models.

NOTE: This course is offered for Finance Majors and Minors only. Non-Finance Majors and Minors must register for FINA 370.

NOTE: Students who have received credit for FINA 370 or 467, or IBUS 370 or 469 may not take this course for credit.

FINA 480 *Management of Financial Institutions* (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. The objective of this course is to provide a framework for understanding the fundamental variables and relationships that affect the management of Canadian financial institutions in the domestic and international environment. Specific

topics include an overview of the financial institutions sector, the regulatory framework, performance and cost analysis, strategic planning, capital structure issues, asset and liability management, management of financial institution risk, international intermediation, and financial innovation. *NOTE A/See §200.2*

NOTE: Students who have received credit for FINA 461 may not take this course for credit.

FINA 490 *Cases in Finance* (3 credits)

Prerequisite: FINA 380 or 440; FINA 390 or 460. This course uses case discussions to focus on the application of the principles of finance learned in FINA 380 and 390 in real-world contexts. Cases will cover topics in corporate finance, investments, and financial markets and institutions. *NOTE A/See §200.2*

NOTE: Students who have received credit for FINA 431 may not take this course for credit.

NOTE: Students who have received credit for FINA 431 may not take this course for credit.

61.80 INTERNATIONAL BUSINESS

Acting Program Director
DANIELLE MORIN

Location	Sir George Williams Campus Annex GM, Room: 201 (514) 848-2721		
Program Objectives	<p>The globalization of business is increasing the demand for managers who are comfortable working in a variety of diverse and multi-cultural environments. The Major in International Business is an attractive and exciting preparation for such a career. International business issues are examined from a strategic perspective and students are also exposed to several disciplines including international management, marketing, and finance, as well as international aspects of politics, economics, and sociology. Students are strongly encouraged to enrol in language courses as elective courses. Adding a Minor in a more specific discipline of interest is also suggested to further complement this program. Participation in the International Student Exchange Program is also highly recommended. This experience will add a more relevant and unique perspective to the overall scope of this exciting degree.</p>		
Programs	<p>24 Major in International Business 9 IBUS 462, 466, 492 15 additional credits chosen from IBUS 370, 465, 471, 493; ECON 319; POLI 305, 307, 315, 394</p>	<p>12 Minor in International Business 9 IBUS 462, 466, 492 3 additional credits chosen from IBUS 370, 465, 471, 493</p>	
Courses	<div> <p>IBUS 370 (also listed as FINA 370) International Financial Management (3 credits) Prerequisite: COMM 308 or FINA 315. This course is designed for students to acquire and demonstrate knowledge of the fundamental principles and issues in international financial management. It covers such topics as foreign exchange markets, exchange rate behaviour, structure and meaning of the international balance of payments, the functioning of fixed and floating exchange rate systems, short- and long-term investment and borrowing decisions, eurocurrency markets, foreign exchange risk management, and capital budgeting decisions for overseas investment. In sum, the topics are covered from the perspective of an individual who wishes to know how the international financial environment will affect the firm. <i>NOTE: Students who have received credit for FINA 370 or 467 or IBUS 469 may not take this course for credit.</i></p> <p>IBUS 462 (also listed as MARK 462) Environment of World Business (3 credits) Prerequisite: COMM 305 or ACCO 218; COMM 215 or DESC 244 or equivalent; COMM 308 or FINA 214; COMM 210 or MANA 266; COMM 224 or MARK 350. This is a foundation course in international business; the</p> </div> <div> <p>objective is to present information which exposes the student to cultural, social, political, economic, legal, and financial environments in which Canadian business executives manage their operations abroad. All students are encouraged to develop their own philosophy towards international business activities by developing research and analytical skills in analysing current and long-term problems perceived in different economic systems and environments. Specific topics include empirical dimensions of world economy, economic development, international trade and investment patterns, regional economic co-operation, area studies, Canadian nationalism, and foreign investment in Canada, etc. <i>NOTE: Students who have received credit for MARK 462 may not take this course for credit.</i></p> <p>IBUS 465 (also listed as MARK 465) International Marketing Management (3 credits) Prerequisite: COMM 224 or MARK 350; MARK 462 or IBUS 462. This course studies the management approach to international marketing, with emphasis on key variables that are controllable by the international marketing manager. Attention is focused on market measurement, product policy, channels, pricing, and promotion, with special emphasis on the development and control of multinational</p> </div>		

marketing strategies and programs. Students will execute a project directed to a selected part of the world.

NOTE: Students who have received credit for MARK 465 may not take this course for credit.

IBUS 466 (also listed as MANA 466)
Management of Multinational Corporations (3 credits)

Prerequisite: MARK 462 or IBUS 462; COMM 222 or MANA 340. This is a course that demonstrates the analytical tools of operations and organization theory applicable within a multinational company. The course is designed to give students a grasp of the problems of strategy formulation and organization, and inculcates a general knowledge of the major parameters in which an international manager operates. Focus is on the Canadian as well as other international companies based in U.S.A., Europe, Japan, etc.

NOTE: Students who have received credit for MANA 466 may not take this course for credit.

IBUS 471 Topics in International Business (3 credits)

Prerequisite: MARK 462 or IBUS 462. This course is intended primarily to provide an opportunity for more intensive study in one or more specific topics of international business. The topic will vary according to the special interests of the professor and the students.

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

IBUS 492 (also listed as MARK 492)
Cross-Cultural Communications and Management (3 credits)

Prerequisite: MARK 462 or IBUS 462. This course deals with the multicultural dimensions of international business operations. The objective is to develop Canadian managerial skills for effective performance in an international setting. Topics to be covered include international negotiations, management of multicultural personnel, cross-cultural consumer behaviour profile, cross-cultural communication, and other cultural aspects of marketing strategy.

NOTE: Students who have received credit for MARK 492 may not take this course for credit.

IBUS 493 (also listed as MANA 493)
International Business Law (3 credits)

Prerequisite: MARK 462 or IBUS 462; COMM 315 or MANA 475. This course is an introduction to international business law. The focus is Canadian but comparative material is included and problems relating to other legal systems are examined. Topics to be covered include private loans applicable to international business transactions, international sales, federal regulations, export controls and anti-dumping, export insurances, and bilateral trade agreements.

NOTE: Students who have received credit for MANA 493 may not take this course for credit.

61.90

MANAGEMENT

<i>Faculty</i>	<i>Associate Professor and Chair of the Department</i> KAMAL ARGHEYD	STEVEN SI MARIE-FRANCE TURCOTTE
	<i>Professors</i> STEVEN H. APPELBAUM VISHWANATH V. BABA A. BAKR IBRAHIM MUHAMMED JAMAL GARY JOHNS	<i>Lecturers</i> NICOLE BÉRUBÉ RICHARD BURGOS FRANK CROOKS PIERRE L. DUCHASTEL REJEAN DUPRÉ JOHN FAKOURI MEHDI FARASHAHI NEIL A. FERNANDES TIMOTHY FIELD PHILIP HUINT ROSALIND KNITTER CLAUDE MARCOTTE TOM O'CONNELL TIMA PETRUSHKA JEAN POMMAINVILLE BARBARA SHAPIRO
	<i>Associate Professors</i> MICK CARNEY LINDA DYER TERRI LITUCHY JEAN MCGUIRE RICK MOLZ ROBERT J. OPPENHEIMER WILLIAM TAYLOR	<i>Adjunct Professors</i> J. PIERRE BRUNET JOYA SEN
	<i>Assistant Professors</i> JOSÉE AUDET GEOFFREY BELL STÉPHANE BRUTUS KAI LAMERTZ SHARON LEIBA-O'SULLIVAN	<i>Adjunct Executive-in-Residence</i> PIERRE SEVIGNY
<i>Location</i>	Sir George Williams Campus Annex GM, Room: 503-37 (514) 848-2924	
<i>Department Objectives</i>	The Management Department plays a critical role in introducing a general management perspective to integrate the specialist orientation of other Departments. As a result, its courses are tailored to be practical and most feature a process of skill-building orientation enhanced by case discussions, experimental exercises, role plays, and student presentations. The major topic areas covered are organizational behaviour and design, strategies and policy, human resource management, entrepreneurship and small business management, industrial relations, and business law.	
<i>Programs</i>	24 Major in Management 24 Credits of MANA 342, 343, 362, 402, 420, 446, 451, 461, 466, 476, 499; IBUS 492 12 Minor in Management 12 Credits from the program of Major in Management 12 Minor in Entrepreneurship and Small Business Management 3 MANA 451 3 MANA 454 6 Credits of MANA 343, 420, 476	24 Major in Human Resource Management 3 MANA 342 3 MANA 343 3 MANA 362 3 MANA 420 3 MANA 463 9 Credits of MANA 402, 443, 444, 445, 446, 498 12 Minor in Human Resource Management 3 MANA 362 9 Credits of MANA 402, 443, 444, 446, 463, 498
<i>Management Co-operative Program</i>	<i>Director</i> BARBARA SHAPIRO, <i>Lecturer</i> (514) 848-2780 The Management Co-operative program is offered to students who are enrolled in the BComm program and are majoring in Human Resource Management. Students interested in applying for the	

Human Resource Management co-op should refer to §24 where a full description of the admission requirements is provided.
Academic content is identical to that of the regular program, but six Study terms are interspersed with four Work terms. Students will be under personal supervision and must meet the requirements specified by both the John Molson School of Business and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Courses

MANA 211 Business Law (6 credits)

A general survey of the law obtaining in the Province of Québec, with special emphasis on the aspects thereof relating to business and commerce. It includes a basic outline of the law of domicile, marriage, persons, property, ownership and its modifications, successions, gifts and wills, testamentary executors, contracts, quasi-contracts, offences and quasi-offences, privileges, hypothecs and prescription, and a more detailed study of the contract of sale, lease and hire of things and of work, mandate, loan, deposit, partnership, suretyship, pledge, insurance, and an outline of the basic law applying to negotiable instruments, corporations, carriers, bankruptcy and winding up, and copyrights, patents, and trade marks.

NOTE A/See §200.2

NOTE: Commerce and Administration students may not take this course for credit.

MANA 213 Foundations of Behaviour (3 credits)

The purpose of this course is to introduce the student to those behavioural concepts relevant to the study of organizational problems. Topics include perception, attitudes, personality, group behaviour, roles, and culture as they relate to organizational processes.

NOTE: Students who have received credit for PSYC 200 or equivalent may not take this course for credit.

NOTE: Commerce and Administration students may not take this course for credit.

MANA 266 Foundations of Modern Management (3 credits)

This course introduces students to the basic elements of the managerial process (e.g., planning, organizing, controlling, motivating, etc.) and presents the historical base upon which contemporary management theory and practice is built. The evolution and scope of management are considered, with illustrations from both large and small Canadian enterprises.

NOTE: Students entering the BComm or BAdmin program as of September 1996 may not take this course for credit.

MANA 341 Organization Theory (3 credits)

Prerequisite: COMM 222 or MANA 340. The function, structure, and processes of organizations provide the focus for study. Interrelationships among the psychosocial, technological, and formal properties of organizations are examined. Emphasis is placed on the diagnosis, analysis of organizational problems, and optimal-design alternatives for improving

organizational performance and effectiveness are explored. The objective is to provide the student with a thorough understanding of the nature of contemporary complex organizations.

MANA 342 Organizational Change and Development (3 credits)

Prerequisite: COMM 222 or MANA 340. An administrative perspective of the behavioural and rational empirical strategies for effecting change in organizations. Emphasis is placed on an eclectic approach to the planning and implementation of change. Models and methods of change are reviewed, and opportunities for the development of change-agent skills are provided.

MANA 343 Negotiation and Conflict Resolution (3 credits)

Prerequisite: COMM 222 or MANA 340. This course examines the causes and consequences of disputes and provides alternative strategies for negotiating and resolving conflicts. It utilizes lectures, videos, cases, interactive exercises, empirical research and videotaping to convey concepts and enhance one's ability to effectively negotiate and resolve disputes.

NOTE: Students who have received credit for MANA 441 may not take this course for credit.

MANA 362 Human Resource Management (3 credits)

Prerequisite: COMM 222 or MANA 340. The aim of the course is to provide a sound background in fundamentals, theory, principles, and practice of human resource management. It focuses on the areas of human resource planning, personnel recruitment, selection and placement, performance appraisal, and career planning.

NOTE A/See §200.2

NOTE: Students who have received credit for MANA 462 may not take this course for credit.

MANA 364 Industrial Relations (3 credits)

Prerequisite: COMM 222 or MANA 340. Industrial Relations is a survey course designed to provide comprehensive knowledge about the state of labour-management relations in Canada.

NOTE A/See §200.2

MANA 365 Collective Bargaining (3 credits)

Prerequisite: MANA 364; MANA 343 or 441. This course is designed to help the student understand the day-to-day problems of negotiating and administering collective agreements. Course content takes into consideration behavioural aspects of industrial relations.

NOTE A/See §200.2

MANA 369 Canadian Business and its Environment (3 credits)

Prerequisite: COMM 215 or DESC 244; ECON 203; COMM 210 or MANA 266; COMM 308 or FINA 214; COMM 224 or MARK 213. The purpose of this course is to examine the functioning of Canadian business and its relationships with its public, including stockholders, consumers, employees, labour, community, and government. Major contemporary issues, such as the impact of technology on people and the physical environment, are examined. *NOTE A/See §200.2*

MANA 402 Supervisory Practice (3 credits)

Prerequisite: COMM 222 or MANA 340. A seminar focusing on the emerging understanding of leadership and supervisory techniques in task-oriented organizations. Contemporary concepts and research on leadership and supervision are examined. The seminar analyses the multiple bases for influence and the situational or contingency aspects of leadership. A balance among the conceptual, diagnostic, and experiential approaches to the development of supervisory capability is emphasized.

MANA 420 Business Research Methods (3 credits)

Prerequisite: COMM 222 or MANA 340; COMM 215 or DESC 244. This seminar focuses on the means by which social and organizational data can be gathered, analysed, and interpreted. Needs of the firm for efficient, timely, and unobtrusive research are given special attention. Topic coverage includes applications of the scientific method, research design, field research techniques, data analysis, research utilization, and use of existing information sources. Student projects parallel the classroom activities by designing and conducting business research studies of limited scale.

MANA 442 Managerial Concepts (3 credits)

Prerequisite: COMM 222 or MANA 340. This course provides an opportunity for intense study of recent developmental topics within the discipline. Topics might include women in management; managing in Québec; management by objectives; long-range planning; equity theories of motivation; changing roles of managers.

MANA 443 Compensation and Benefits Management (3 credits)

Prerequisite: MANA 362 or 462. The purpose of this course is to provide a thorough understanding of the role, conceptual basis, procedures, and methods associated with the management and administration of compensation and benefits within an organization. Issues such as job families and ladders, salary surveys, position valuation, pay equity, incentive compensation, and benefits administration are addressed.

MANA 444 Training and Development (3 credits)

Prerequisite: MANA 362 or 462. This course

examines the conceptual and practical issues regarding orientation of new employees, the socialization process, learning theories and diagnoses, training technologies, developmental strategies, and the management of the training and development function.

MANA 445 Health and Safety Management (3 credits)

Prerequisite: MANA 362 or 462. This course examines the critical aspects of health and safety administration within organizations. It provides a brief overview of the relevant legislation and focuses upon prevention, causes, detection, intervention, reintegration, epidemiological and clinical investigation, and health development. Physical and psychological aspects of health and safety are examined.

MANA 446 Staffing (3 credits)

Prerequisite: MANA 362 or 462. This course is designed to cover the theory, research, and practice of organizational staffing. The primary focus of this course will be on the theoretical, analytical, and conceptual tools needed to effectively staff organizations with qualified employees. The main coverage will include human resource strategy, planning, recruitment, job analysis, measurement, legal issues, and various selection methods. Attention will focus on relevant theory and research as well as techniques for developing valid and reliable selection procedures. Both the strategic needs of the organization and the legal environment of contemporary organizations in Québec and Canada will be considered.

MANA 451 Managing a Small Business (3 credits)

Prerequisite: COMM 320 or 410. This introductory course emphasizes the operational aspects of management that are uniquely important to a small enterprise. It provides opportunity to practise operational decision-making under conditions characteristic for small firms.

MANA 454 Family Business Management (3 credits)

Prerequisite: COMM 308 or FINA 315; COMM 224 or MARK 350; COMM 225 or DESC 250; COMM 222 or MANA 340; COMM 315 or MANA 475; COMM 320 or 410; MANA 451; and 39 additional credits in Commerce and Administration. This course focuses on family business management issues such as the entrepreneurial process, the dual relationship, conflict management, letting go, succession planning in the family business, managing the transition to the next generation, going outside the family, strategic management and managing strategic change in family firms.

MANA 461 Implementing Competitive Strategies (3 credits)

Prerequisite: COMM 401 or 310. This course concentrates on how the strategy formulated in COMM 401 is implemented by the organization. Organization structures are studied in differing

environments. The relationships between organization structures and the organization's strategy are analysed. The problems encountered by general managers as well as middle managers in the process of the implementation of the set policies are studied.

NOTE A/See §200.2

MANA 463 Strategic Human Resource Management (3 credits)

Prerequisite: MANA 362 or 462, and any two of the following: MANA 402, 443, 444, 446. This course is a final-year integrative seminar for Human Resource Management majors. It focuses on the philosophies underlying current human resource management principles and policies and the processes of their implementation. It utilizes cases to integrate human resource management areas such as recruitment, selection, training, performance appraisal, compensation, and benefits administration.

MANA 466 (also listed as IBUS 466) Management of Multinational Corporations (3 credits)

Prerequisite: IBUS 462 or MARK 462; COMM 222 or MANA 340. This is a course that demonstrates the analytical tools of operations and organization theory applicable within a multinational company. The course is designed to give students a grasp of the problems of strategy formulation and organization, and inculcates a general knowledge of the major parameters in which an international manager operates. Focus is on the Canadian as well as other international companies based in U.S.A., Europe, Japan, etc.
NOTE: Students who have received credit for IBUS 466 may not take this course for credit.

MANA 476 Managerial Law (3 credits)

Prerequisite: COMM 315 or MANA 475. Federal and provincial government regulation of business, including bankruptcy, anti-combines, trade marks and patents, labour law, insurance, special commercial contracts including secured transactions, fair employment, environmental law.

MANA 477 The Law of Insolvency and Secured Transactions (3 credits)

Prerequisite: COMM 315 or MANA 475. An examination of the various laws and cases, both federal and provincial, across Canada, governing commercial insolvency, with particular emphasis upon the liability of directors and officers, and the creditor's rights in bankruptcy, including the role of inspectors and the trustee. An examination of the various forms of secured transactions, of which creditors may avail themselves, more particularly financial institutions, including assignment of book debts, pledge, mortgages, bonds, trust deeds.

MANA 478 Company Law (3 credits)

Prerequisite: COMM 315 or MANA 475. The examination of important legal issues relating to

the business corporation, including an analysis of their legal nature and structure, and the powers, rights, and obligations of directors, officers, and shareholders, including analysis of the legal implications, insider trading, company re-organization, mergers, joint ventures, and takeovers. These matters are studied through the Federal, Québec, and Ontario Companies' Acts and relevant court cases.

MANA 479 Labour Law (3 credits)

Prerequisite: COMM 315 or MANA 475. A study of the law and relevant court cases dealing with major labour-management issues, including collective bargaining, union certification, strikes, lock-outs, grievances, and arbitration. Covers Canadian law, primarily that of Québec.

MANA 493 (also listed as IBUS 493) International Business Law (3 credits)

Prerequisite: IBUS 462 or MARK 462; COMM 315 or MANA 475. This course is an introduction to international business law. The focus is Canadian but comparative material is included and problems relating to other legal systems are examined. Topics to be covered include private loans applicable to international business transactions, international sales, federal regulations, export controls and anti-dumping, export insurances, and bilateral trade agreements.

NOTE: Students who have received credit for IBUS 493 may not take this course for credit.

MANA 498 Special Topics in Human Resource Management (3 credits)

Prerequisite: Written permission of the Department. This course is intended to complement and supplement human resource management (HRM) courses taken previously or concurrently. The course emphasizes HRM literature and modern thought.

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

MANA 499 Special Topics in Management (3 credits)

Prerequisite: Written permission of the Department. Intended to complement and supplement business courses taken previously or concurrently, this course emphasizes business literature and modern thought. Students are encouraged to work independently on research topics of interest to them. Students repeating MANA 499 register for credits under MANA 498.
NOTE A/See §200.2

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

61.100

MARKETING

Faculty	Associate Professor and Chair of Department B. ZEKI GIDENGIL	K. LEE MCGOWN JERRY ROSENBLATT CHRISTOPHER A. ROSS GAD SAAD MRUGANK V. THAKOR
	Professor Emeritus V.H. (MANEK) KIRPALANI	
	Professors ULRIKE de BRENTANI MICHEL LAROCHE	Assistant Professors ONUR H. BODUR RAMDAS CHANDRA JORDAN LE BEL MICHELE PAULIN SOURAV RAY
	Associate Professors BRYAN BARBIERI MICHEL J. BERGIER B. KEMAL BÜYÜKKURT ANNAMMA JOY LEA PREVEL KATSANIS	Lecturer HAROLD SIMPKINS
Location	Sir George Williams Campus Annex GM, Room: 300-31 (514) 848-2952	
Department Objectives	The Marketing Department seeks to cultivate in each student the skills and perspectives essential for effective and responsible marketing. Emphasis is on creating marketing strategies and plans based on a thorough understanding of consumer and industrial buying behaviour. The Department is committed to fostering a dynamic entrepreneurial orientation together with an appreciation of the essence, importance, and potential power of marketing.	
Programs	24 Major in Marketing 3 MARK 402 3 MARK 405 3 MARK 495 15 MARK credits offered by the Department.	12 Minor in Marketing 3 MARK 402 3 MARK 405 6 MARK credits offered by the Department.
Marketing Co-operative Program	Director HAROLD J. SIMPKINS, Lecturer (514) 848-2955 The Marketing Co-operative program is offered to students who are enrolled in the BComm program and are majoring in Marketing. The Marketing co-op is a combination of the common 42-credit core, the Marketing Major and four Work terms. The program seeks to cultivate in each student the skills and perspectives essential for effective and responsible marketing. Students interested in applying for the Marketing co-op should refer to §24 where a full description of the admission requirements is provided.	
Courses	MARK 201 Introduction to Marketing (3 credits) This course introduces non-Commerce students to the managerial concepts and practices of marketing. The process of developing a marketing strategy is examined along with the factors and interrelationships related thereto. Readings and cases are used to help students apply these concepts in a variety of business settings. <i>NOTE 1: This course is available to non-Commerce program students only. Any such student intending to register in the Marketing Cluster for</i>	<i>Non-Commerce Students or intending to take specific upper-level Marketing courses must take this course as a prerequisite.</i> <i>NOTE 2: Students who have received credit for MARK 213 or 350 may not take this course for credit.</i> MARK 402 Marketing Research (3 credits) Prerequisite: COMM 224 or MARK 201 or 350. The role of research in the marketing process, the role of models, and the development of measurement techniques are discussed.

Emphasis is placed on the nature and scope of marketing research methods for obtaining internal and external data, and on the steps and principles involved in gathering and analysing data. The student is also briefly introduced to applications of marketing research and to the technique involved in conducting a marketing study. *NOTE A/See §200.2*

MARK 405 Consumer Behaviour (3 credits)
Prerequisite: COMM 224 or MARK 201 or 350.
This course analyses the motivations, roles, and behaviour of the consumers, how they are affected by economic, social, and cultural influences, and how the marketer may model this behaviour for decision-making purposes.
NOTE A/See §200.2

NOTE 1: Although not required, it is strongly recommended that MARK 402 be taken prior to or concurrently with this course.

NOTE 2: Students who have received credit for MARK 352 may not take this course for credit.

MARK 453 Advertising (3 credits)
Prerequisite: COMM 224 or MARK 201 or 350.
The objectives of this course are to provide the student with an introduction to an understanding of the principles of advertising from three different viewpoints: the nature of services provided by advertising agencies, the needs of the users (i.e. business, institutions) of these services, the needs of society in economic, ethical, and legal terms.

NOTE A/See §200.2

MARK 454 Personal Selling and Sales Management (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350.
This course has a dual focus: the cultivation of personal selling skills, and the theoretical and applied aspects of managing the personal selling function. Cases, readings, simulations, and presentations are deployed to achieve the course goals. *NOTE A/See §200.2*

MARK 455 Direct-Response Marketing (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350.
This course explores state-of-the-art managerial approaches and analytical techniques for developing, executing, and evaluating direct-response marketing programs. Through recent case studies, comprehensive projects, and/or empirical field research, the student will learn about strategies, offer planning and positioning, list selection and segmentation, creative strategies, data base marketing, fulfilment process, testing, media (catalogues, mail, telephone, broadcast, print, and others) and application of direct marketing to industrial settings.

MARK 460 Integrated Marketing Communications (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350; MARK 402; 352 or 405; 453; 455 or 491M previously or concurrently. This course examines the disciplines, rigours, and inter-

relationships involved in planning and synergistically integrating the various components of a firm's communication mix, with particular emphasis on advertising, sales promotion, public relations, personal selling, and reseller support. Students will develop an actual integrated marketing communications plan for a product, service, or idea using the concepts discussed in class.

MARK 462 (also listed as IBUS 462) Environment of World Business (3 credits)

Prerequisite: COMM 305 or ACCO 218; COMM 215 or DESC 244 or equivalent; COMM 308 or FINA 214; COMM 210 or MANA 266; COMM 224 or MARK 350. This is a foundation course in international business; the objective is to present information which exposes the student to cultural, social, political, economic, legal, and financial environments in which Canadian business executives manage their operations abroad. All students are encouraged to develop their own philosophy towards international business activities by developing research and analytical skills in analysing current and long-term problems perceived in different economic systems and environments. Specific topics include empirical dimensions of world economy, economic development, international trade and investment patterns, regional economic co-operation, area studies, Canadian nationalism, and foreign investment in Canada, etc.

NOTE: Students who have received credit for IBUS 462 may not take this course for credit.

MARK 463 Retailing (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350.
This course seeks to apply the theories of marketing and administration to the retail situation. Topics to be covered include site selection for single and multi-unit retail outlets, organizing and staffing the retail operation, the wholesaler-retailer relationship, consumer behaviour in the retail situation. The impact of such new developments as consumer cooperatives, franchising, discounting, and computer technology on the future of retailing is also considered.

NOTE A/See §200.2

MARK 465 (also listed as IBUS 465) International Marketing Management (3 credits)

Prerequisite: COMM 224 or MARK 350; MARK 462 or IBUS 462. This course studies the management approach to international marketing, with emphasis on key variables that are controllable by the international marketing manager. Attention is focused on market measurement, product policy, channels, pricing, and promotion, with special emphasis on the development and control of multinational marketing strategies and programs. Students will execute a project directed to a selected part of the world.

NOTE: Students who have received credit for IBUS 465 may not take this course for credit.

MARK 480 *Customer Service Excellence*
(3 credits)

Prerequisite: COMM 224 or MARK 201 or 350. This course explores the nature and scope of customer service, its importance in business, its impact on profitability, its dimensions, and how to manage it. Through field studies in given industries, the student will 1) identify examples of outstanding service and of very poor service to gain a better appreciation of customers' expectations and of their assessment of current levels of customer service delivery, 2) analyse service encounters to understand the many dimensions of customer service, 3) gather, evaluate, and improve existing measures of customer satisfaction to learn how companies should go about getting feedback about themselves, and 4) identify and evaluate current customer service training practices to understand whether companies are "paying lip service" or "walking the talking".

MARK 485 *Business-to-Business Marketing* (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350. The course focuses on the managerial aspects of industrial marketing. The concept of organization buying behaviour and its impact on marketing strategy formulation are discussed. Management of the industrial marketing mix considering product service development, intelligence, promotion, channels, and performance measurement is covered, both in existing product lines and new product-launch activities.

MARK 486 *Product Strategy and Innovation* (3 credits)

Prerequisite: COMM 224 or MARK 201 or 350. The focus of this course is the development of a dynamic and successful product strategy for the organization. Topics covered include product life cycle concepts, the adoption and diffusion of innovations, strategic product planning, developing the service offering, and the process of innovating and launching new products and services.

MARK 491 *Special Topics Seminar*
(3 credits)

Prerequisite: Written permission of the Department. This seminar is an inquiry into various selected topics which vary from year to year. Students repeating MARK 491 register for credits under MARK 492. *NOTE A/See §200.2*
NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

MARK 492 *(also listed as IBUS 492) Cross-Cultural Communications and Management*
(3 credits)

Prerequisite: MARK 462 or IBUS 462. This course deals with the multicultural dimensions of international business operations. The objective is to develop Canadian managerial skills for effective performance in an international setting. Topics to be covered include international negotiations, management of multicultural personnel, cross-cultural consumer behaviour profile, cross-cultural communication, and other cultural aspects of marketing strategy.
NOTE: Students who have received credit for IBUS 492 may not take this course for credit.

MARK 495 *Strategic Marketing Planning*
(3 credits)

Prerequisite: Sixty credits including 15 credits in Marketing of which six credits must be MARK 402 and 405. This is a holistic, integrative, capstone course directed primarily to cultivating the skills and technique required in effective marketing planning. Various pedagogical tools including cases, readings, and a major project will be deployed to achieve the course goals. Students will develop an actual marketing plan for a product, service, or idea using the concepts and techniques studied throughout their major program.
NOTE: Students who have received credit for MARK 490 may not take this course for credit.

61.120

ADMINISTRATION

Courses

ADMI 201 *Introduction to Administration (Administered by the Finance Department)*
(3 credits)

This course is intended to develop a basic understanding of the role of administration in our society. The course includes a survey of different forms of organizations, their social and legal responsibilities, and how they function to achieve their goals.

NOTE: Commerce and Administration students may not take this course for credit.

ADMI 202 *Perspective on Business (Administered by the Finance Department)* (3 credits)

This course is designed to review the historical development of business (in Canada in particular) and to examine the relationships between the firm (management) and the owners, the employees, the customers, the government, and the community. Further, it studies some of the problems facing Canadian business today: the dehumanizing aspect, pollution problems, large vs. small firms, foreign ownership, competition, etc.

NOTE: Commerce and Administration students may not take this course for credit.

61.140

PROGRAM OPTIONS FOR NON-COMMERCE STUDENTS

Courses/Non-Commerce Students

Students not enrolled in a program offered by the John Molson School of Business may register for six credits per term for a maximum of 30 credits (total) within the School of Business.

Students not registered in the John Molson School of Business, who wish to undertake any courses offered by the School, but do not have the stated prerequisites, must obtain permission in writing from the Student Request Committee, John Molson School of Business *prior to registration*. The Office of the Associate Dean reserves the right to deregister those students who do not adhere to academic regulations.

CERTIFICATE IN BUSINESS STUDIES

This program is not open to students registered in a program leading to an undergraduate degree. Students may transfer into the Certificate program up to 12 credits earned in an incomplete degree or Certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Admission Requirements

- a) Diploma of Collegial Studies or the equivalent; MATH 208, 209; ECON 201, 203; INTE 290 or COMP 201
 - or
 - b) Mature students: MATH 208, 209; ECON 201, 203; INTE 290 or COMP 201.
-

Program

30 Certificate in Business Studies

24 COMM 210, 212, 215, 217, 220, 222, 224, 225

6 additional credits from the John Molson School of Business chosen in consultation with an academic adviser.

MINOR IN BUSINESS STUDIES

This program is not open to students registered in a program leading to an undergraduate degree in the John Molson School of Business.

NOTE: A GPA of 2.50 is required for entrance into this Minor.

Admission Requirements

MATH 208, 209; ECON 201, 203; INTE 290 or COMP 201.

Program

30 Minor in Business Studies

24 COMM 210, 212, 215, 217, 220, 222, 224, 225

6 additional credits from the John Molson School of Business chosen in consultation with an academic adviser.

Program

MARKETING CLUSTER FOR NON-COMMERCE STUDENTS

This 15-credit cluster is available to students registered in undergraduate programs outside the John Molson School of Business. Students choosing this cluster have the opportunity to add a business-oriented marketing component to their arts, science, engineering, or fine arts degrees.

15 Marketing Cluster for Non-Commerce Students

9 MARK 201, 402, 405

6 Additional credits from MARK 453, 454, 455, 460, 463, 480, 485, 486

NOTE: Since non-Commerce students can only register for a maximum of 30 credits within the John Molson School of Business, students registered in the Minor in Business Studies, the BCompSc Information Systems Option, or the BSc Specialization in Physics/Marketing cannot register for the Marketing cluster.

THE BASICS OF BUSINESS CLUSTER

Arts and Science students should make it their business to get some insight into the world of commerce and administration.

15 The Basics of Business Cluster

15 Chosen from ACCO 230, 240; ADMI 201, 202; COMM 215, 499F (Personal Finance); MANA 211, 213, 266; MARK 201

NOTE: This cluster is not open to BComm/BAdmin students. Not all cluster credits are transferable to the BComm/BAdmin program.

NOTE: Since non-Commerce students can only register for a maximum of 30 credits within the John Molson School of Business, students registered in the Minor in Business Studies, the BCompSc Information Systems Option, or the BSc Specialization in Physics/Marketing cannot register for the Basics of Business cluster.

61.150 COMPUTER SCIENCE

For a major in Management Information Systems see §61.50

61.160 SPECIAL CERTIFICATE PROGRAMS

There are many organizations within the business community designed to serve the needs of people working in specialized areas of business. These organizations recognize that the educational qualifications of those seeking membership must be continually upgraded. Therefore, they sponsor an Academic Certificate which may be obtained through correspondence courses, or through a lecture program.

The John Molson School of Business cooperates with these business organizations by permitting personnel to register as Visiting students, and to take courses leading to a certificate to be awarded by the organization concerned.

Students must comply with the University regulations regarding dates of application and Visiting Commerce student entrance requirements as outlined in the Academic Calendar §11. In addition, they must meet the requirements of the specific organization.

The credit courses taken may be applied towards the BComm degree, provided the student meets the admission requirements and wishes to transfer from Visiting Commerce status to undergraduate status after completing a Certificate program. Students are advised that they must meet the BComm curriculum requirements in force at the date of transfer.

Each Certificate program has one or more special courses required to complete the program. These courses do not carry credit towards an undergraduate degree and are designated as non-credit courses.

Students interested in the following Certificate programs may obtain details of required courses from the organization concerned:

- The American Marketing Association (Montréal Chapter)
- Institute of Canadian Bankers
- The Insurance Institute of Canada
- The Trust Companies Institute of Canada
- Professional Secretaries International (CPS)
- Canadian Institute of Management

61.170 SPECIAL PROGRAMS IN ACCOUNTANCY

The three professional organizations listed below recognize certain Concordia University courses for course exemptions or standing in their professional designation programs.

L'ORDRE DES COMPTABLES AGRÉÉS DU QUÉBEC: Chartered Accountant (CA)

The John Molson School of Business offers a Diploma in Accountancy which has been approved by the Order of Chartered Accountants of Québec. Entry into the program normally requires an undergraduate degree in Commerce, and a Major in Accountancy with high academic standing. Applicants lacking an appropriate pattern of undergraduate work will be required to complete successfully certain qualifying courses, as assigned by the director of the Diploma program. For further details, refer to the Graduate Calendar of Concordia's School of Graduate Studies.

LA CORPORATION PROFESSIONNELLE DES COMPTABLES EN MANAGEMENT ACCRÉDITÉS DU QUÉBEC: Certified Management Accountant (CMA)

Students who wish to follow the CMA program must register with L'Ordre des comptables en

management accrédités du Québec, 715 Square Victoria 3rd Floor, Montréal, Québec, H2Y 2H7, (514) 849-1155 / (800) 263-5390. The list of courses comprising the CMA program is shown below:

ECON 201	Introduction to Microeconomics
ECON 203	Introduction to Macroeconomics
COMM 215	Business Statistics
COMM 217	Financial Accounting
COMM 220	Analysis of Markets
COMM 222	Organizational Behaviour and Theory
COMM 225	Production and Operations Management
COMM 301	Management Information Systems
COMM 305	Managerial Accounting
COMM 308	Introduction to Finance
COMM 315	Business Law and Ethics
COMM 401	Strategy and Competition
ACCO 310	Intermediate Accounting I
ACCO 320	Intermediate Accounting II
ACCO 330	Cost and Management Accounting
ACCO 340	Income Taxation in Canada
ACCO 350	Accounting Information Systems
ACCO 420	Advanced Financial Accounting
ACCO 430	Advanced Management Accounting
ACCO 440	Advanced Taxation
ACCO 450	Financial Auditing
ACCO 470A	Special Topics in Accounting (Management Accounting)
MANA 476	Managerial Law

NOTES:

1. *This equivalence table is subject to amendment by the Corporation.*
2. *Students taking University courses must satisfy the necessary prerequisite courses.*
3. *The Entrance Examination of the Society of Management Accountants of Canada is mandatory. Coaching seminars for these courses are encouraged prior to writing the Entrance Examination. A student may not sit for this examination until all other Corporation courses or their equivalents have been successfully completed.*
4. *Prospective CMA students should note that the above sequence of courses is a prerequisite to the new CMA program, which commences with an Entrance Examination (held in June each year). It is necessary to sit the Entrance Examination in order to take part in a 24-month Strategic Leadership Program. The Program consists of work experience, independent study, group and residential sessions. All candidates for the Entrance Examination must be registered student members of the Corporation.*

LA CORPORATION PROFESSIONNELLE DES COMPTABLES GÉNÉRAUX LICENCIÉS DU QUÉBEC: Certified General Accountant (CGA)

Students who wish to follow the CGA program must register with L'Ordre des comptables généraux licenciés du Québec located at 445 boulevard St-Laurent Bureau 450, Montréal, Québec, H2Y 2Y7, (514) 861-1823.

The list of courses comprising the CGA Academic Program is shown below:

ECON 201	Introduction to Microeconomics
ECON 203	Introduction to Macroeconomics
COMM 215	Business Statistics
COMM 217	Financial Accounting
COMM 220 (3) (6)	Analysis of Markets
COMM 301	Management Information Systems
COMM 305	Managerial Accounting
COMM 308 (3) (6)	Introduction to Finance
COMM 315	Business Law and Ethics
COMM 401	Strategy and Competition
ACCO 310	Intermediate Accounting I
ACCO 320	Intermediate Accounting II
ACCO 330	Cost and Management Accounting
ACCO 340 (4) (6)	Income Taxation in Canada
ACCO 350	Accounting Information Systems
ACCO 400 (1) (6)	Accounting Theory

ACCO 410 (1) (6)	Governmental and Not-for-Profit Accounting
ACCO 420 (1) (6)	Advanced Financial Accounting
ACCO 440 (4) (6)	Advanced Taxation
ACCO 450 (2) (5) (6)	Financial Auditing
ACCO 460 (5)	Operational Auditing
ACCO 470D (2)	Special Topics in Accounting (Advanced Auditing)
ACCO 490 (4)	Seminar in Taxation

-
- (1) Prerequisite to the Financial Accounting (FA4) examination
 (2) Prerequisite to the Auditing 2 (AU2) examination
 (3) Prerequisite to the Finance 2 (FN2) examination and professional certification program in
 Financial Performance
 (4) Prerequisite to the Taxation 2 (TX2) examination
 (5) Prerequisite to the Management Auditing 1 (MU1) examination
 (6) Prerequisite to Professional Applications (PA-1) examination

NOTE: The listing above is subject to amendment. Please communicate with the program coordinator.



faculty of engineering and computer science

71.10 FACULTY OF ENGINEERING AND COMPUTER SCIENCE

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71.20 BENG

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71.80 DIGITAL IMAGE/SOUND AND COMPUTER SCIENCE

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71

71 FACULTY OF ENGINEERING AND COMPUTER SCIENCE

Dean
M. NABIL ESMAIL

*Associate Dean, Undergraduate Programs and
Student Affairs*
TERRILL FANCOTT

Associate Dean, Instructional Affairs
KHASHAYAR KHORASANI

*Chair, Department of Electrical and Computer
Engineering*
J. CHARLES GIGUÈRE

Chair, Department of Mechanical Engineering
RAMA B. BHAT

*Chair, Department of Building, Civil and
Environmental Engineering*
OSAMA MOSELHI

Chair, Department of Computer Science
GRAHAM MARTIN

Location

Sir George Williams Campus
J.W. McConnell Building, Room: LB 1001; (514) 848-3109
Student Affairs, Room LB 1015; (514) 848-3056

Objectives

By dedicating itself to program excellence, the Faculty seeks to prepare its graduates not only to practice their professions well into the twenty-first century but also to participate, in national and international affairs, as good citizens with a social conscience. It is equally dedicated to the advancement of knowledge through research and graduate education, and to the development of the professions of engineering and computer science. The Faculty strives to provide an environment of equal opportunity, collegiality, and lively intellectual debate for all members of its community.

71.10 FACULTY OF ENGINEERING AND COMPUTER SCIENCE

71.10.1

Programs Offered

The following programs are offered in the Faculty of Engineering and Computer Science:

1. BEng degrees in Building, Civil, Computer, Electrical, Industrial, Mechanical Engineering, and Software Engineering.
2. BCompSc degree.
3. Minor in Computer Science.

The requirements for the programs are different, and the appropriate section in the following pages must be consulted for each.

71.10.2

*Admission
Requirements*

General admission requirements are listed in §13.
In addition, the following specific requirements exist for the various programs. Applicants should specify their choice of program on their application.
Students entering the Faculty of Engineering and Computer Science are presumed to have acquired some familiarity with computers and programming, either through a course or through time spent working with a personal or other computer.

APPLICANTS FROM QUÉBEC INSTITUTIONS

Successful completion of a two-year pre-university cégep program is required, including the specific courses in the appropriate profile, as follows:

1. **BEng (all programs)**
**BCompSc (Computer Systems and
Software Systems Options)**

Cégep Profile 10.10

Mathematics — 103, 105, 203
Physics — 101, 201, 301
Chemistry — 101, 201
Biology — 301

2. **BCompSc (Information Systems and
Computer Applications Options; and
Minor in Computer Science)**

Cégep Profile 10.12

Mathematics — 103, 105, 203

Applications from graduates of cégep technology programs will also be considered. Program requirements for successful applicants will be determined on an individual basis.

APPLICANTS FROM OUTSIDE QUÉBEC

Academic qualifications presented by students applying from institutions outside Québec should be comparable to those expected of students applying from within Québec.

Where the pre-university education is shorter than in Québec, students may be considered for admission to the first year of the Extended Credit Program. (See §13.3.2 to 13.3.6, §71.20.2, and 71.70.3)

MATURE ENTRY

Admission requirements are listed in §14.

Students should refer to the Academic Regulations of the University in §16.

71.10.3

Academic Regulations

Definitions

Assessable courses: *all record entries of courses* listed in this Concordia Calendar for which a grade point value is specified in §16.3.3. However, any course which is a requirement for admission to a program offered by the Faculty of Engineering and Computer Science will not be counted unless specifically listed on the student's admission letter.

Dean's Office: appropriate member of the Dean's Office, normally the Associate Dean, Student Affairs.
Program of Study: course requirements in effect at the time of the latest admission or re-admission to a program, for example, BEng (Civil) or BCompSc (Information Systems), including modifications on an individual basis as specified or approved in writing by the Associate Dean's Office, or the Student Request Committee of Faculty Council.

Grade Points: as defined in §16.3.3 of this Calendar.

Weighted Grade Point Average (WGPA): as defined in §16.3.10 of this Calendar. A grade obtained as a result of writing a supplemental examination and/or completing the work for a course graded "INC" or "MED" is included as part of the assessment period in which it is recorded.

Academic year: a period of time which includes a Summer and its subsequent Fall and Winter terms.

Objectives

The objectives of these regulations are:

- a) to ensure that the Faculty can certify that all of its graduates are qualified to enter their profession, and
- b) to ensure that students can, with the assistance or intervention of the Faculty, assess themselves objectively and plan programs of study designed to meet their individual needs.

Grading System

See §16.3.3 for the Concordia grading system.

NOTE: Although a "C-" grade is designated as Satisfactory, a weighted grade point average of 2.00 is required for acceptable standing in the Faculty of Engineering and Computer Science.

Regulations

1. Students' standings are assessed at the end of each academic year providing they have registered for at least 12 credits subsequent to their previous assessment, or in the case of a first assessment, subsequent to their admission to a program of study.
Standings of students who have attempted less than 12 credits since their last assessment are assessed as follows:
 - a) The standings of potential graduates are determined on the basis that these credits constitute an extension of the last assessment period.
 - b) The standings of other students are determined at the end of the academic year in which they have attempted a total of at least 12 credits since their last assessment.
2. Students' standings are determined according to the following criteria.

Acceptable Standing:

A WGPA of at least 2.00 for the assessment period.

Students in acceptable standing may proceed subject to the following conditions: any failing grade must be cleared by passing the supplemental examination, if one exists, and/or completing the work for the course or by repeating the failed course or in the case of an elective, by replacing the failed course by an alternative within the same group of electives. Any variation must be approved by the Associate Dean's Office.

Conditional Standing:

A WGPA of at least 1.50 but less than 2.00 for the assessment period.

Students in conditional standing may proceed subject to the following conditions.

- a) They must successfully repeat all courses in which failing grades were obtained, or replace

them by alternatives approved by the appropriate member of the Associate Dean's Office in consultation with the student's Department.

- b) They must repeat or replace by approved alternatives at least one-half of those courses in which they obtained grades in the "D" range. The specific courses to be repeated will be determined by the appropriate member of the Associate Dean's Office in consultation with the student's Department.
- c) Courses to be taken may be specified by the Associate Dean's Office. In no case will the number exceed five per term for full-time students and two per term for part-time students.
- d) They must obtain acceptable standing at the time of their next assessment.

Failed Standing:

Failure to meet the criteria for acceptable or conditional standing, or conditional standing over two consecutive assessments.

Failed students are subject to the following regulations.

1. Failed students who are not subject to regulation 2 below may apply for readmission through the Dean's Office of the Faculty to which they wish to be readmitted. If readmitted, they will be placed on academic probation. They must return to acceptable standing at the time of their next assessment. Other conditions will be determined at the time of readmission.
2. Students who are in failed standing for a second time will be dismissed from the University. In subsequent years, should they wish to return to university studies, they must contact the Office of the Registrar for information concerning conditions and procedures for seeking admission. Applications will not normally be considered before a five-year absence from the program. Decisions of the relevant authority in the Faculty to which application is made are final.

Availability of Supplemental Examinations

Supplemental examinations are not offered in the Faculty of Engineering and Computer Science other than in the courses COMP 201 and COMP 218.

71.10.4
*Registration
Regulations*

1. Students (other than failed students) whose registration in the program has lapsed for 30 consecutive months or more must apply to the Associate Dean's Office in order to have their curriculum obligations re-evaluated as per paragraph 2 of §16.2.1 of this Calendar. Permission to register will be granted only upon presentation of the results of this re-evaluation.
2. The maximum regular session course load for full-time students in the regular programs is three more than one-third of the total credits for their particular option as specified in subsequent sections.
3. The maximum regular session course load for full-time students in the Extended Credit and Mature Student programs is 30 credits until they have completed all the courses required beyond those specified for their particular option in subsequent sections.
4. The fall- and winter-term course loads of full-time students may be unbalanced by up to three credits without permission; further differences between the two terms require the permission of the appropriate Associate Dean, Student Affairs or delegate.
5. Except for students registered for the co-operative format, the maximum load in a Summer Session is eight credits, with no more than four and a half credits in either of its terms.

71.10.5
*Graduation
Regulations*

Students must be in acceptable standing and satisfy the requirements specified for the academic program in which they were admitted. The structure and courses of the program may change in the period between admission and graduation due to curriculum development, but students remaining in acceptable standing are not required to complete more credits than were required at the time they were admitted.

The maximum number of credits obtained as an Independent student which may be transferred into programs offered by the Faculty of Engineering and Computer Science is as follows:

BEng and BCompSc: 30

71.10.6
*Availability of
Programs*

Full-time students in the Engineering program will choose a six- or eight-term sequence. Due to the heavy workload involved, six-term sequences are only recommended for the exceptional student. In general, introductory level courses are offered in both day and evening. Subject to the Registration Regulations in §71.10.4 above, a student may register on a part-time basis. Further information on sequencing may be found in the Undergraduate Program Guide issued by the Office of the Associate Dean.

71.10.7
Course Sequences

The Undergraduate Program Guide specifies course sequences for the BEng and BCompSc programs, including their Mature Entry and Extended Credit programs.

71.10.8
*The Co-operative
Format*

A limited number of high ranking students entering the first year of the regular program leading to the BCompSc degree and the BEng degree are permitted to undertake their studies in the co-operative format in conjunction with the Institute for Co-operative Education. See §24.

The academic content is identical to that of the regular programs; however, in order to continue their studies in the co-operative format in the Faculty of Engineering and Computer Science, or to graduate from one of its programs as Members of the Institute for Co-operative Education, students must:

- (i) maintain a cumulative grade point average (CGPA)* of at least 2.70 after their first year of study in their program with no single term below 2.50;
- (ii) be assigned a pass for each work term report.

For additional information, please refer to §24.

*The CGPA is calculated over all courses attempted since admission to the program in the manner described in §16.3.10 for the WGPA.

71.20 BENG

71.20.1
*Curriculum for the
Degree of BEng*

The University offers programs leading to the degree of BEng in the fields of Building, Civil, Computer, Electrical, Industrial, Mechanical, and Software Engineering. Students enrolled in the BEng program in Building Engineering may, after the completion of all but one of their 200- and 300-level courses, apply through the Associate Dean to enter a combined degree program leading to the joint award of an undergraduate and a graduate degree in this field.

The BEng degree requires completion of a minimum of 115.5 to 120 credits depending on the program chosen. Course requirements comprise a group of required courses with a group of elective courses which allow students to select part of their program to provide some depth in an area of specialization according to their particular interests, or breadth in the general field of their chosen discipline.

Students must have completed all 200-level courses required for their program before they can register for any 400-level courses. They must complete the requirements for their degree in a maximum of four academic years after that in which they first register for courses beyond the 200 level. Students failing to satisfy this requirement are withdrawn from the program; they may be granted permission by the Associate Dean's Office to continue in the program for one additional year provided they are eligible to apply for readmission according to the regulations in §71.10.3. Students who fail a fall-term 200-level course which is inherent to their discipline are required to repeat it in the immediate subsequent Winter Term. In addition, students obtaining grades in the "D" range for such courses may choose to repeat them. The courses to which this regulation applies are specified annually by discipline in the Undergraduate Program Guide.

In their final undergraduate year, students with high standing may apply for permission through the Associate Dean's Office to register for a limited number of graduate courses offered by the Faculty in lieu of some courses in the undergraduate program.

Successful completion of a BEng program requires hard work and considerable dedication on the part of each student. Courses are presented with the expectation of an average of about two hours of "outside" work for each lecture hour and about one-half hour of "outside" work for each hour spent in the laboratory for all programs of study.

71.20.2
*Extended Credit
Program*

Students admitted to an Extended Credit Program under the provisions of §13.3.2 or 13.8.1 must successfully complete the requirements of a specific program, as set out in §71.30 to 71.50, plus the following courses:

- a) Building, Civil, Industrial, and Mechanical Engineering:
MATH 202³, 203³, 204³, 205³
PHYS 204³, 205³, 224¹, 225¹
CHEM 205³
COMP 201³
Six credits chosen from courses in the humanities and social sciences.
- b) Electrical and Computer Engineering:
The courses specified in a), plus PHYS 206³

71.20.3
*Accreditation by the
Canadian Council of
Professional
Engineers*

All Engineering programs in the Faculty have been designed to meet the criteria of the Canadian Engineering Accreditation Board. These programs are assessed at regular intervals according to the rules and procedures of the Board. The graduates of these programs are thus qualified for membership in the Order of Engineers of Québec, or its equivalent in any other provincial jurisdiction, and may practise as licensed engineers according to their respective regulations.

71.20.4
Membership in the
Order of Engineers of
Québec

The Ordre des ingénieurs du Québec (O.I.Q.) currently admits graduates of the BEng curricula in Building, Civil, Computer, Electrical, Industrial and Mechanical Engineering, as members according to the Engineers Act and the O.I.Q. By-Laws, providing applicants can complete the French language requirements.

Québec law requires that candidates seeking admission to provincially-recognized Québec professional corporations (such as the Ordre des ingénieurs du Québec) possess an appropriate knowledge of the French language.

A person is deemed to have that knowledge who:

- (1) has taken at least three years of full-time instruction given in French at the secondary or post-secondary level;
- (2) has passed the French mother tongue examinations in the fourth or fifth grade of the secondary level;
- (3) has obtained in Québec, a secondary school certificate for the 1985-86 school year or later.

In all other cases, a person must obtain a certificate delivered by the Office de la langue française or hold a certificate defined as equivalent by regulation of the Government.

Candidates may obtain a certificate by passing a test prescribed by the Office de la langue française.

Information on this testing program of the Office de la langue française may be obtained by writing to: Office de la langue française, 800 Place Victoria, 13^e étage, C.P. 316, Montréal, Québec, H4Z 1G8, (514) 873-8361.

71.20.5
Degree
Requirements

To be recommended for the degree of BEng, students must satisfactorily complete the courses of the Engineering Core as well as those specified for their particular program in subsequent sections in accordance with the graduation requirements in §71.10.5.

Engineering Core

		<i>Credits</i>
EMAT 213	Ordinary Differential Equations	3.00
EMAT 233	Advanced Calculus	3.00
EMAT 391	Numerical Methods in Engineering	3.00 (1)
ENCS 282	Technical Writing and Communication	3.00
ENGR 275	Principles of Electrical Engineering	3.75 (2)
ENGR 371	Probability and Statistics in Engineering	3.00
ENGR 402	Engineering Law	1.50
ENGR 492	Impact of Technology on Society	3.00
	General Education elective	3.00
		<hr/> 26.25

NOTES:

- (1) Students in Software Engineering may replace EMAT 391 with COMP 361.
- (2) Students in Electrical and Computer Engineering shall replace ENGR 275 with ENGR 273.

Students must select three General Education elective credits from the General Education List in §71.20.6. Students in Building Engineering shall replace ENGR 492 with BLDG 481. Students in Civil and Industrial Engineering shall take ACCO 220 as their General Education elective.

71.20.6
Complementary
Studies

The professional engineer requires, in addition to technical knowledge and skills, an understanding of society, its infrastructure and needs to promote safety and preservation of the environment. Complementary Studies include courses in the areas of economics and management; engineering law to respect the responsibilities and ethical principles arising from the Code of Professions as well as safety; effective communication skills to improve the ability of the student to organize and express his/her thoughts; and courses in social sciences and humanities to appreciate the central issues, methodologies, and thought processes in these areas.

The following are prescribed electives in General Education:

General Education List

Prior to registering, students who do not have any specified prerequisites must obtain permission of the relevant department.

		<i>Credits</i>
ACCO 220	Financial and Managerial Accounting	3.00
ANTH 202	Introduction to Culture	3.00
ANTH 203	Culture and Biology: An Anthropological Perspective	3.00
ANTH 204	Native Peoples of North America	3.00
ANTH 270	Anthropology and Contemporary Issues	3.00

CHEM 208	Chemical Hazards in the Work Environment	3.00
CLAS 266	An Introduction to Classical Archaeology	3.00
COMS 352	Broadcasting Policy in Canada	3.00
COMS 360	Mass Communication	3.00
COMS 461	Organizational Communication	3.00
ECON 201	Introduction to Microeconomics	3.00
ECON 203	Introduction to Macroeconomics	3.00
ECON 361	Industrial Organization	3.00
ECON 391	Economics of the Environment	3.00
ECON 396	Natural Resource Economics	3.00
FRAN 302	Langue française: niveau d'approfondissement I	3.00
FRAN 303	Langue française: niveau d'approfondissement II	3.00
FRAN 305	Communication orale	3.00
FRAN 306	Communication écrite	3.00
FRAN 318	Le français commercial I	3.00
FRAN 319	Le français commercial II	3.00
FRAN 400	Langue française: niveau de perfectionnement I	3.00
FRAN 401	Langue française: niveau de perfectionnement II	3.00
FRAN 414	Le français de la technologie	3.00
FRAN 415	Rédaction technique	3.00
FRAN 419	Le français de la finance et de la gestion	3.00
GEOL 203	Introduction to Environmental Geology	3.00
GEOL 205	Non-Renewable Resources	3.00
HIST	200- and 300-level courses	3.00
MATH 215	Ideas in Mathematics	3.00
PHIL 201	Problems of Philosophy	3.00
PHIL 210	Critical Thinking	3.00
PHIL 220	Introduction to the Philosophy of Science	3.00
PHIL 232	Introduction to Ethics	3.00
PHIL 328	Conceptual Revolutions in Science: Space and Time	3.00
PHIL 329	Conceptual Revolutions in Science: Quantum Theory	3.00
POLI 275	Women and Politics	3.00
POLI 385	Environmental Issues and Policy	3.00
SCHA 203	Canadian Environmental Issues	3.00
SCHA 204	Global Environmental Issues	3.00
SCHA 250	Introduction to Science and Human Affairs I	3.00
SCHA 251	Introduction to Science and Human Affairs II	3.00
SCHA 355	Technology and Society: From Ancient Times Until 1780	3.00
SCHA 356	Technology and Society: Since 1780	3.00
SOCI 203	Introduction to Society	3.00
SOCI 220	Social Organization	3.00
SOCI 230	Race and Ethnic Relations	3.00
SOCI 261	Social Problems	3.00

71.20.7
Language
Requirement

The Faculty of Engineering and Computer Science is committed to ensuring that its students possess good writing skills. Hence, every student in an undergraduate degree program is required to demonstrate competence in writing English or French. Students must sit for the University Writing Test in their first semester of studies. Permission to register for second-year and subsequent studies is contingent on proof of having written this exam. Students who do not pass the exam may continue in the program, but must register for remedial courses.

Students who are required to take ESL courses shall sit for the exam in the semester following completion of their language courses.

71.30 DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

<i>Faculty</i>	<i>Chair</i> J. CHARLES GIGUÈRE, <i>Professor</i>	MOHAMED NEKILI PURNENDU SINHA CHUNYAN WANG
	<i>Professors</i> M. OMAIR AHMAD ASIM J. AL-KHALILI AHMED K. ELHAKEEM JEREMIAH F. HAYES KHASHAYAR KHORASANI EUGENE I. PLOTKIN VENKATANARAYANA RAMACHANDRAN	<i>Adjunct Professors</i> VIJAY BHARGAVA PRAVEEN K. JAIN YAN-FEI LIU DONALD T. MCGILLIS RAJNIKANT V. PATEL OTTO SCHWELB VIJAY SOOD K. THULASIRAMAN
	<i>Professor Emeritus</i> STANLEY J. KUBINA	<i>Adjunct Associate Professors</i> D. AL-KHALILI ANADER BENYAMIN-SEEYAR MICHEL DE CHAMPLAIN CHRISTIAN S. GARJOUR MUMTAZ B. GAWARGY MICHEL KADOCH SERDAR KALAYCIOGLU JEAN MAHSEREDJIAN
	<i>Research Professor</i> M.N.S. SWAMY	<i>Adjunct Assistant Professors</i> MAJID BARAZANDE-POUR AMBRISH CHANDRA JAAFAR CHERKADUI FAYEZ HYJAZIE G. MOSCHOPOULOS RONGGANG QI YOUSSEF R. SHAYAN ZIWEN YAO JIAJUN ZHANG
	<i>Associate Professors</i> GEZA JOOS FERHAT KHENDEK LESLIE M. LANDSBERGER WILLIAM E. LYNCH MUSTAFA K. MEHMET ALI ROBERT PAKNYS RABIN RAUT M.R. SOLEYMANI SOFIÈNE TAHAR CHRISTOPHER W. TRUEMAN	
	<i>Assistant Professors</i> ANJALI AGARWAL SHAHIN HASHTRUDI ZAD NAWWAF N. KHARMA	
<i>Location</i>	Sir George Williams Campus Hall Building, Room: H 961 (514) 848-3100	
<i>Department Objectives</i>	<p>Electrical Engineering is concerned primarily with energy and information, their conversion and transmission in the most efficient and reliable manner. This vast field of endeavour includes many specialties and Electrical Engineers may be involved in one or more of these throughout their careers. A partial list includes: electronics, integrated circuit design, very large scale integrated (VLSI) circuit design, layout and testing, controls, robotics, system simulation, telecommunications, signal processing, computer hardware design, software design, power devices, power systems, electromechanical systems, microelectromechanical devices, electromagnetics, antennas, wave guides, lasers, and optoelectronics.</p> <p>Computer Engineering is the driving force of the information revolution and its transformation of society. Over the course of their careers, computer engineers will be called upon to meet a number of challenges, most of which cannot be imagined today. A partial list of current specialties includes: computer architecture, digital electronics, digital circuits, very large scale integrated (VLSI) circuit design, layout and testing, digital circuit testing and reliability, software design, software engineering, digital communication and computer networks.</p> <p>The four-year programs consist of the Engineering Core, taken by all engineering students, program cores and electives. The Electrical Engineering Core provides a solid introduction to all aspects of the discipline, to programming methodology and to the design of large software systems. Technical electives are scheduled to enable students to register for sets of related technical courses. Current sets of electives include: Communications and Signal Processing, Computer Systems, Electronics</p>	

and VLSI, Power and Systems, and Waves and Electromagnetics. The Computer Engineering Core provides a thorough grounding in all aspects of computer hardware and software. Technical electives allow students to acquire further knowledge in various aspects of hardware or software. A mandatory final-year design project gives students in both programs the opportunity to apply the knowledge they have acquired to the design and testing of a working prototype.

Both programs involve an extensive amount of personal computing. Students are encouraged to acquire personal computers with Pentium™ or equivalent processors. Information concerning Québec government loans for the purchase of computers is available from Concordia's Financial Aid and Awards Office.

71.30.1
Course Requirements
(BEng in Electrical
Engineering)

The program in Electrical Engineering consists of the Engineering Core, the Electrical Engineering Core, and one of two options as set out below. The normal length of the program is 119 credits.

Engineering Core (26.25 credits)
See §71.20.5.

Electrical Engineering Core

		<i>Credits</i>
COEN 231	Introduction to Discrete Mathematics	3.00
COEN 243	Programming Methodology I	3.00
COEN 244	Programming Methodology II	3.00
COEN 311	Computer Organization and Software	3.00
COEN 312	Digital Systems Design I	3.75
COMP 352	Data Structures and Algorithms	3.00
ELEC 251	Fundamentals of Applied Electromagnetics	3.00
ELEC 311	Electronics I	4.50
ELEC 321	Introduction to Semiconductor Materials and Devices	3.50
ELEC 331	Fundamentals of Electrical Power Engineering	3.75
ELEC 351	Electromagnetic Waves and Guiding Structures	3.00
ELEC 361	Signals and Systems	3.00
ELEC 461	Fundamentals of Telecommunications Systems	3.75
ELEC 490	Electrical Engineering Project	4.00
EMAT 252	Complex Variables	3.00
EMAT 332	Vector Calculus and Partial Differential Equations	3.00
ENGR 370	Modelling and Analysis of Physical Systems	3.75
ENGR 372	Fundamentals of Control Systems	3.75
ENGR 401	Engineering Economics and Management Principles	1.50
		<hr/>
		62.25

Telecommunications Option

		<i>Credits</i>
COEN 320	Introduction to Real-Time Systems	3.00
COEN 445	Communication Protocols and Network Security	4.00
COMP 346	Operating Systems	4.00
ELEC 462	Digital Transmission Systems	3.75
ELEC 463	Telecommunication Networks	3.00
ELEC 471	Random Processes	3.00
ELEC 473	Overview of Communications Systems	3.00
	Elective credits chosen from list below	6.75
		<hr/>
		30.50

Students must complete two of the three courses listed below.

ELEC 464	Communications Systems Engineering	3.75
ELEC 465	Internetworking and Network Management	3.75
ELEC 472	Performance Evaluation of Telecommunication Systems	3.00

Electronics/Systems Option

		<i>Credits</i>
COEN 412	Digital Electronics	3.75
ELEC 312	Electronics II	4.50
ELEC 442	Introduction to Digital Signal Processing	3.75
	Elective credits chosen from lists below	18.50
		<hr/>
		30.50

Electronics/Systems Electives

Students must complete a minimum of 27.5 credits chosen from any of the courses listed below.
 Courses are listed in groups to facilitate course selection.

Credits

ELEC 498	Topics in Electrical Engineering	3.00
MANA 266	Foundations of Modern Management	3.00
SOEN 282	Document Processing	2.00

A. Communications and Signal Processing*Credits*

ELEC 441	Analog Filter Design	3.75
ELEC 462	Digital Transmission Systems	3.75
ELEC 463	Telecommunication Networks	3.00
ELEC 471	Random Processes	3.00

B. Computer Systems*Credits*

COEN 320	Introduction to Real-Time Systems	3.00
COEN 345	Software Testing and Validation	4.00
COEN 414	Digital Systems Design II	3.75
COEN 416	Computer Architecture and Design	3.00
COEN 417	Microprocessor Systems	4.50
COEN 420	Real-Time Systems Design	3.00
COEN 421	Embedded Systems and Software Design	4.50
COEN 445	Communication Protocols and Network Security	4.00
COMP 346	Operating Systems	4.00
SOEN 341	Software Process	3.00
SOEN 342	Software Requirements and Specifications	3.00
SOEN 343	Software Design	3.00

C. Electronics/VLSI*Credits*

ELEC 411	Pulse and Waveform Generation	3.75
ELEC 421	Solid State Devices	3.75
ELEC 422	Design of Integrated Circuit Components	3.75
ENCS 454	VLSI Design I	4.00
ENCS 455	VLSI Design II	4.00
ENCS 456	VLSI Process Technology	3.75

D. Power/Systems*Credits*

ELEC 431	Electrical Power Systems	3.75
ELEC 432	Control of Electrical Power Conversion Systems	3.75
ELEC 433	Power Electronics	3.75
ENCS 245	Mechanical Analysis	3.00
ENCS 472	Robot Manipulators	3.75
ENGR 471	Linear Systems	3.75
ENGR 472	System Optimization	3.75
ENGR 473	Control System Design	3.50

E. Waves and Electromagnetics*Credits*

ELEC 453	Microwave Engineering	3.75
ELEC 454	Optical Electronics	3.75
ELEC 455	Acoustics	3.00
ELEC 456	Antennas	3.00

71.30.2
Course Requirements
(BEng in Computer
Engineering)

The program in Computer Engineering consists of the Engineering Core, the Computer Engineering Core, and one of the two options as set out below. The normal length of the program is 119.5 credits.

Engineering Core: (26.25 credits)
See §71.20.5

Computer Engineering Core

		<i>Credits</i>
COEN 231	Introduction to Discrete Mathematics	3.00
COEN 243	Programming Methodology I	3.00
COEN 244	Programming Methodology II	3.00
COEN 311	Computer Organization and Software	3.00
COEN 312	Digital Systems Design I	3.75
COEN 417	Microprocessor Systems	4.50
COEN 445	Communication Protocols and Network Security	4.00
COEN 490	Computer Engineering Project	4.00
COMP 346	Operating Systems	4.00
COMP 352	Data Structures and Algorithms	3.00
ELEC 311	Electronics I	4.50
ELEC 353	Basic Electromagnetics and Transmission Line Theory	3.00
ELEC 361	Signals and Systems	3.00
EMAT 252	Complex Variables	3.00
ENGR 370	Modelling and Analysis of Physical Systems	3.75
ENGR 372	Fundamentals of Control Systems	3.75
ENGR 401	Engineering Economics and Management Principles	1.50
SOEN 341	Software Process	3.00
		<hr/>
		60.75

System Hardware Engineering Option

		<i>Credits</i>
COEN 412	Digital Electronics	3.75
COEN 414	Digital Systems Design II	3.75
COEN 416	Computer Architecture and Design	3.00
ELEC 461	Fundamentals of Telecommunications Systems	3.75
ENCS 454	VLSI Design I	4.00
	Electives chosen from the lists below	14.25
		<hr/>
		32.50

System Software Engineering Option

		<i>Credits</i>
COEN 320	Introduction to Real-Time Systems	3.00
COEN 345	Software Testing and Validation	4.00
COEN 420	Real-Time Systems Design	3.00
COEN 421	Embedded Systems and Software Design	4.50
COMP 353	Databases	4.00
SOEN 282	Document Processing	2.00
SOEN 342	Requirements and Specifications	3.00
SOEN 343	Software Design	3.00
	Electives chosen from the lists below	6.00
		<hr/>
		32.50

Electives to complete option requirements may be chosen from the first list and/or from the list appropriate to the option.

Both Options

		<i>Credits</i>
COEN 498	Topics in Computer Engineering	3.00
COMP 471	Computer Graphics	4.00
COMP 472	Artificial Intelligence	4.00
COMP 474	Introduction to Expert Systems	4.00
ELEC 442	Introduction to Digital Signal Processing	3.75

ENCS 245	Mechanical Analysis	3.00
ENCS 472	Robot Manipulators	3.75
ENGR 471	Linear Systems	3.75
MANA 266	Foundations of Modern Management	3.00
SOEN 344	Software Architecture	4.00

System Hardware Engineering Option

Credits

COEN 320	Introduction to Real-Time Systems	3.00
COEN 345	Software Testing and Validation	4.00
COEN 420	Real-Time Systems Design	3.00
COEN 421	Embedded Systems and Software Design	4.50
COMP 353	Databases	4.00
ELEC 312	Electronics II	4.50
ELEC 462	Digital Transmission Systems	3.75
ELEC 463	Telecommunication Networks	3.00
ELEC 471	Random Processes	3.00
ENCS 455	VLSI Design II	4.00
SOEN 282	Document Processing	2.00
SOEN 342	Requirements and Specifications	3.00
SOEN 343	Software Design	3.00

System Software Engineering Option

Credits

COEN 412	Digital Electronics	3.75
COEN 414	Digital Systems Design II	3.75
COEN 416	Computer Architecture and Design	3.00
COMP 335	Introduction to Theoretical Computer Science	3.00
COMP 442	Compiler Design	3.00
COMP 451	Database Design	3.00
COMP 465	Design and Analysis of Algorithms	3.00
ELEC 461	Fundamentals of Telecommunications Systems	3.75
SOEN 357	User Interface Design	4.00
SOEN 431	Formal Methods	3.00
SOEN 448	Management of Evolving Systems	3.00
SOEN 449	Component Engineering	3.00
SOEN 475	Imaging and Visualization	3.00

71.30.3 The Co-operative Format

Director

CHRISTOPHER W. TRUEMAN, *Associate Professor*

Students entering the program leading to the BEng degree in Electrical or Computer Engineering may request permission to undertake their studies in the co-op format by following the application procedure specified in §24.

Academic content is identical to that of the regular program, but seven Study terms are interspersed with four Work terms. Students in Electrical or Computer Engineering will complete between 15.75 and 18.25 credits in each Study Term to obtain the required number of credits for a BEng (Electrical or Computer).

Students are supervised personally and must meet the requirements specified in §71.10.8 in order to continue their studies in the co-op format.

Liaison between the student, the employers and the Institute for Co-operative Education is provided by the Electrical and Computer Engineering co-op committee, which includes the student's advisers. Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

71.40 DEPARTMENT OF MECHANICAL ENGINEERING

<i>Faculty</i>	<p><i>Chair</i> RAMA B. BHAT, <i>Professor</i></p> <p><i>Associate Chair</i> MINGYUAN CHEN, <i>Associate Professor</i></p> <p><i>Professors</i> A.K. WAIZUDDIN AHMED M. NABIL ESMAIL SUONG VAN HOA SUBHASH RAKHEJA GEORGIOS H. VATISTAS</p> <p><i>Professors Emeriti</i> RICHARD M.H. CHENG SUI LIN HUGH J. MCQUEEN MOHAMED O.M. OSMAN</p> <p><i>Associate Professors</i> AKIF ASIL BULGAK KUDRET DEMIRLI RAJAMOHAN GANESAN WAHID S. GHALY GERARD J. GOUW ELIZA M. HASEGANU KALMAN I. KRAKOW VOJISLAV LATINOVIC RAFIK A. NEEMEH ION STIHARU JAROSLAV V. SVOBODA</p>	<p><i>Assistant Professors</i> HAMDI A. BASHIR BRANDON W. GORDON IBRAHIM G. HASSAN HENRY HONG MARTIN PUGH CHUN-YI SU PAULA WOOD-ADAMS</p> <p><i>Adjunct Professors</i> ADOLF E. BLACH RAO V. DUKKIPATI VIRENDRA JHA HANY MOUSTAPHA MARC J. RICHARD</p> <p><i>Adjunct Associate Professor</i> PAUL-ÉMILE BOILEAU</p> <p><i>Adjunct Assistant Professors</i> GRANT GUEVREMONT OSAMA HUNAIDI ASHOK KAUSHAL MUTHUKUMARAN PACKIRISAMY MICHEL ROBICHAUD</p> <p><i>Consultant to Industrial Engineering Program</i> LOUISE QUESNEL</p>
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	<i>Location</i>	<p><i>Sir George Williams Campus</i> Hall Building, Room: H 549 (514) 848-3131</p>
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	<i>Department Objectives</i>	<p>The Department of Mechanical Engineering offers two distinct undergraduate programs, one leading to the BEng in Mechanical Engineering, the other to the BEng in Industrial Engineering. Mechanical Engineering is concerned with all forms of power generation (hydro-electric, steam, internal combustion, nuclear, jet rocket, and fuel cells), the design of mechanisms and machines, transportation systems, controls and automation, vibration analysis, environmental control (heating, ventilation, and refrigeration), materials handling, and precision measurement. The Mechanical Engineering curriculum consists of a combination of core courses with a series of technical electives that allow students to obtain some specialization in a particular area of the field depending on their interests and expected future professional activity. Four options are available: Thermo Fluid and Propulsion Engineering; Design and Manufacturing Engineering; Automation and Control Systems; and Aerospace and Vehicle Systems.</p> <p>Industrial Engineering is concerned with the design, organization, analysis, and integration of people and industrial systems components in order to achieve or enhance effectiveness. These components include whole machines, transportation and conveyance elements, physical plant, organizational frameworks, schedules, and budgets. The Industrial Engineering curriculum is therefore designed to give students the background needed to define and solve problems related to the conception, improvement, integration, and implementation of industrial systems.</p>

71.40.1
Course Requirements
(BEng in Mechanical
Engineering)

The program in Mechanical Engineering consists of the Engineering Core, the Mechanical Engineering Core, and option requirements as shown below. The minimum length of the program is 119.50 credits.

Engineering Core (26.25 credits)
See §71.20.5

Mechanical Engineering Core

		<i>Credits</i>
EMAT 311	Transform Calculus and Partial Differential Equations	3.00
ENGR 242	Statics	3.00
ENGR 243	Dynamics	3.00
ENGR 244	Mechanics of Materials	3.75
ENGR 251	Thermodynamics I	3.00
ENGR 361	Fluid Mechanics I	3.00
ENGR 370	Modelling and Analysis of Physical Systems	3.75
ENGR 372	Fundamentals of Control Systems	3.75
ENGR 401	Engineering Economics and Management Principles	1.50
MECH 211	Mechanical Engineering Drawing	3.00
MECH 215	Programming for Mechanical and Industrial Engineers I	3.00
MECH 216	Programming for Mechanical and Industrial Engineers II	3.00
MECH 221	Materials Science	2.00
MECH 311	Manufacturing Processes	3.50
MECH 313	Machine Drawing and Design	3.00
MECH 321	Properties and Failure of Materials	3.50
MECH 343	Theory of Machines I	3.50
MECH 351	Thermodynamics II	3.50
MECH 352	Heat Transfer I	3.50
MECH 361	Fluid Mechanics II	3.50
MECH 372	Industrial Electronics	3.50
MECH 373	Instrumentation and Measurements	3.50
MECH 441	Mechanical Engineering Design	3.00
MECH 443	Mechanical Vibrations	3.50
MECH 490	Capstone Mechanical Engineering Design Project	4.00
		<hr/> 80.25

Option Requirements

Students in the Mechanical Engineering program must complete at least 13 elective credits from one of options A, B, C, or D. Prior to registration for elective courses, students indicate their choice of option on a form available from the Department, which must be submitted to the Chair's office for approval *prior to March 15*.

1. Option A — Thermo Fluid and Propulsion

Students must complete a minimum of 13 credits from the following courses, with at least two of the three courses marked *.

		<i>Credits</i>
ENGR 460	Finite Element Analysis	3.75
ENGR 473	Control System Design	3.50
ENGR 475	Process Dynamics and Control	3.75
ELEC 334	Electric Machinery	3.75
MECH 413	Theory of Machines II	3.50
MECH 421	Mechanical Shaping of Metals and Plastics	3.50
MECH 422	Mechanical Behaviour of Polymer Composite Materials	3.00
MECH 423	Casting, Welding, Heat Treating, and Non-Destructive Testing	3.50
MECH 424	Design and Fabrication of Micromachines and Micromechanisms	3.50
MECH 446	Process Equipment Design	3.00
MECH 452*	Heat Transfer II	3.50
MECH 453	Heating, Ventilation and Air Conditioning Systems	3.00
MECH 454	Vehicular Internal Combustion Engines	3.00
MECH 461*	Gas Dynamics	3.50
MECH 462*	Turbomachinery and Propulsion	3.00
MECH 464	Aerodynamics	3.00
MECH 465	Gas Turbine Design	3.50
MECH 471	Microprocessors and Applications	3.50
MECH 498	Topics in Mechanical Engineering	3.00

2. Option B — Design and Manufacturing

Students must complete a minimum of 13 credits from the following courses, with at least one of the two courses marked *.

		<i>Credits</i>
ENGR 460	Finite Element Analysis	3.75
ENGR 473	Control System Design	3.50
ELEC 334	Electric Machinery	3.75
INDU 323	Industrial Operations Research	3.00
INDU 410	Safety Engineering	3.50
INDU 411*	Computer Integrated Manufacturing	3.50
MECH 412*	Computer-Aided Mechanical Design	3.50
MECH 413	Theory of Machines II	3.50
MECH 421	Mechanical Shaping of Metals and Plastics	3.50
MECH 422	Mechanical Behaviour of Polymer Composite Materials	3.00
MECH 423	Casting, Welding, Heat Treating, and Non-Destructive Testing	3.50
MECH 424	Design and Fabrication of Micromachines and Micromechanisms	3.50
MECH 425	Manufacturing of Composites	3.50
MECH 426	Stress and Failure Analysis of Machinery	3.00
MECH 431	Principles of Aeroelasticity	3.00
MECH 444	Guided Vehicle Systems	3.00
MECH 446	Process Equipment Design	3.00
MECH 447	Fundamentals of Vehicle System Design	3.00
MECH 453	Heating, Ventilation and Air Conditioning Systems	3.00
MECH 463	Fluid Power Control	3.50
MECH 471	Microprocessors and Applications	3.50
MECH 498	Topics in Mechanical Engineering	3.00

3. Option C — Automation and Control Systems

Students must complete a minimum of 13 credits from the following courses, with at least two of the three courses marked *.

		<i>Credits</i>
ENGR 471	Linear Systems	3.75
ENGR 472	System Optimization	3.75
ENGR 473*	Control System Design	3.50
ENGR 475	Process Dynamics and Control	3.75
ELEC 334	Electric Machinery	3.75
INDU 323	Industrial Operations Research	3.00
MECH 413	Theory of Machines II	3.50
MECH 422	Mechanical Behaviour of Polymer Composite Materials	3.00
MECH 424	Design and Fabrication of Micromachines and Micromechanisms	3.50
MECH 444	Guided Vehicle Systems	3.00
MECH 446	Process Equipment Design	3.00
MECH 447	Fundamentals of Vehicle System Design	3.00
MECH 453	Heating, Ventilation and Air Conditioning Systems	3.00
MECH 463*	Fluid Power Control	3.50
MECH 471*	Microprocessors and Applications	3.50
MECH 498	Topics in Mechanical Engineering	3.00

4. Option D — Aerospace and Vehicle Systems

Students must complete a minimum of 13 credits from the following courses, with at least two of the four courses marked *.

		<i>Credits</i>
ENGR 460	Finite Element Analysis	3.75
ENGR 473	Control System Design	3.50
MECH 412	Computer-Aided Mechanical Design	3.50
MECH 413	Theory of Machines II	3.50
MECH 422	Mechanical Behaviour of Polymer Composite Materials	3.00
MECH 424	Design and Fabrication of Micromachines and Micromechanisms	3.50
MECH 425	Manufacturing of Composites	3.50
MECH 426	Stress and Failure Analysis of Machinery	3.00
MECH 431	Principles of Aeroelasticity	3.00
MECH 447*	Fundamentals of Vehicle System Design	3.00
MECH 448*	Vehicle Dynamics	3.00
MECH 454	Vehicular Internal Combustion Engines	3.00

MECH 461	Gas Dynamics	3.50
MECH 462	Turbomachinery and Propulsion	3.00
MECH 463	Fluid Power Control	3.50
MECH 464*	Aerodynamics	3.00
MECH 471	Microprocessors and Applications	3.50
MECH 480*	Flight Control Systems	3.00
MECH 481	Materials Engineering for Aerospace	3.00
MECH 482	Avionic Navigation Systems	3.00
MECH 498	Topics in Mechanical Engineering	3.00

NOTE: A student of one option is allowed to select a maximum of one elective course from the list of courses for other options.

71.40.2
Course Requirements
(BEng in Industrial
Engineering)

The program in Industrial Engineering consists of the Engineering Core, the Industrial Engineering Core and elective credits as shown below. The minimum length of the program is 119.25 credits.

Engineering Core (26.25 credits)

See §71.20.5

Note: Students are required to take ACCO 220 — Financial and Managerial Accounting (3.00 credits) as a General Education elective.

Industrial Engineering Core

		<i>Credits</i>
EMAT 311	Transform Calculus and Partial Differential Equations	3.00
ENGR 242	Statics	3.00
ENGR 243	Dynamics	3.00
ENGR 244	Mechanics of Materials	3.75
ENGR 251	Thermodynamics I	3.00
ENGR 361	Fluid Mechanics I	3.00
ENGR 370	Modelling and Analysis of Physical Systems	3.75
ENGR 372	Fundamentals of Control Systems	3.75
INDU 211	Introduction to Production and Manufacturing Systems	3.00
INDU 311	Simulation of Industrial Systems	3.50
INDU 313	Industrial Economics	3.00
INDU 320	Production Engineering	3.00
INDU 323	Industrial Operations Research	3.00
INDU 330	Engineering Management	3.00
INDU 372	Quality Control and Reliability	3.00
INDU 411	Computer Integrated Manufacturing	3.50
INDU 412	Human Factors Engineering	3.75
INDU 421	Facilities Design and Material Handling Systems	3.50
INDU 423	Inventory Control	3.50
INDU 490	Capstone Industrial Engineering Design Project	4.00
MECH 211	Mechanical Engineering Drawing	3.00
MECH 215	Programming for Mechanical and Industrial Engineers I	3.00
MECH 216	Programming for Mechanical and Industrial Engineers II	3.00
MECH 221	Materials Science	2.00
MECH 311	Manufacturing Processes	3.50
MECH 313	Machine Drawing and Design	3.00
		<hr/> 83.50

Electives

Students must complete a minimum of 9.5 credits from the following courses, including at least two of the courses marked *.

		<i>Credits</i>
ELEC 334	Electric Machinery	3.75
ENGR 472	System Optimization	3.75
ENGR 473	Control System Design	3.50
ENGR 475	Process Dynamics and Control	3.75
INDU 410*	Safety Engineering	3.50
INDU 430*	Advanced Operations Research	3.00
INDU 463*	Industrial Automation	3.00
INDU 466*	Decision Models in Service Sector	3.00

INDU 471*	Stochastic Models in Industrial Engineering	3.00
INDU 475*	Advanced Concepts in Quality Improvement	3.00
INDU 498*	Topics in Industrial Engineering	3.00
MECH 321	Properties and Failure of Materials	3.50
MECH 372	Industrial Electronics	3.50
MECH 373	Instrumentation and Measurements	3.50
MECH 412	Computer-Aided Mechanical Design	3.50
MECH 421	Mechanical Shaping of Metals and Plastics	3.50
MECH 422	Mechanical Behavior of Polymer Composite Materials	3.00
MECH 423	Casting, Welding, Heat Treating, and Non-Destructive Testing	3.50
MECH 425	Manufacturing of Composites	3.50
MECH 431	Principles of Aeroelasticity	3.00
MECH 453	Heating, Ventilation and Air Conditioning Systems	3.00
MECH 463	Fluid Power Control	3.50
MECH 471	Microprocessors and Applications	3.50

71.40.3
The Co-operative
Format

Director
GERARD J. GOUW, *Associate Professor*

Students entering the program leading to the BEng degree in Mechanical or Industrial Engineering may request permission to undertake their studies in the co-op format by following the application procedure specified in §24.

Academic content is identical to that of the regular program, but seven Study terms are interspersed with four Work terms. Students in Mechanical or Industrial Engineering will normally complete between 14 and 20.25 credits in each Study Term to obtain the required 119.50 credits for a BEng (Mechanical) and 119.25 credits for a BEng (Industrial).

Students are supervised personally and must meet the requirements specified in §71.10.8 in order to continue their studies in the co-op format.

Liaison between the student, the employers and the Institute for Co-operative Education is provided by the Mechanical and Industrial Engineering co-op committee, which includes the student's advisers.

Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

71.50 DEPARTMENT OF BUILDING, CIVIL AND ENVIRONMENTAL ENGINEERING

<i>Faculty</i>	<i>Chair</i> OSAMA MOSELHI, <i>Professor</i>	<i>Assistant Professors</i> DOMINIQUE DEROME CATHERINE MULLIGAN HUGUES RIVARD
	<i>Associate Chair</i> SABAH ALKASS, <i>Associate Professor</i>	
	<i>Professors</i> ANDREAS K. ATHENITIS CLAUDE BÉDARD PAUL P. FAZIO RICHARD WILLIAM GUY HUY KINH HA FARIBORZ HAGHIGHAT ADEL M. HANNA OSCAR A. PEKAU HORMOZ B. POOROOSHASB AMRUTHUR S. RAMAMURTHY THEODORE STATHOPOULOS ZENON A. ZIELINSKI RADU ZMEUREANU	<i>Adjunct Professors</i> M. BOMBERG H. KEIRA C. ZHANG
	<i>Professors Emeriti</i> DOREL FELDMAN CEDRIC MARSH MICHAEL S. TROITSKY	<i>Adjunct Associate Professors</i> W. BAJJALI R. BALACHAMDAR B.L. CARBALLADA R. CHARETTE S. GAMATI V. GOCEVSKI H. LUCHIAN PATRICK SAATHOFF D. TRAN
	<i>Associate Professors</i> BALA ASHTAKALA MAMDOUH M. EL-BADRY MARIA ELEKTOROWICZ MOHAMMED ZAHEERUDDIN	<i>Adjunct Assistant Professors</i> M. ABDEL-RAHMAN V. BATT M. BERJAOUI R. CHIFRINA A. NOORZAD HANQING WU
<i>Location</i>	<i>Sir George Williams Campus</i> Department of Building, Civil and Environmental Engineering, Room: BE 341 (514) 848-3200 (514) 848-7800	
<i>Objectives</i>	<p>Building Engineering, as a discipline, encompasses the body of knowledge which pertains to all phases in the life-cycle of a constructed facility, namely conception, planning, design, construction, operation, and disposal.</p> <p>Concordia has a unique undergraduate program leading to a BEng in Building Engineering designed to meet the needs of the construction industry for engineers familiar with the overall design of built facilities.</p> <p>In addition to the basic engineering sciences, the program emphasizes the fundamentals of building materials, structural analysis and design, building services (acoustical, heating, lighting, air conditioning), economics, and project management. The student also has available certain electives which will be of use in the design of various phases of a building.</p> <p>Students who complete all but one of their 200- and 300-level courses with a sufficiently high standing may apply through the Associate Dean, Student Affairs to enter a combined program leading to the joint award of both a BEng and an MEng degree in Building Engineering. It is expected that those who aspire to leadership roles within the building industry will enter such a combined program. The combined program requires a further 12 months of full-time study, after which graduates will not only have obtained further grounding in the basics, but will also have specialized in one of four branches: Building Science, Building Environment, Building Structures, Construction Management. For details of the graduate component, refer to the School of Graduate Studies Calendar.</p>	

71.50.1
Course Requirements

The program in Building Engineering consists of the Engineering Core, the Building Engineering Core, and a further nine elective credits chosen from a specified group of courses. The normal length of the program is 119.75 credits.

Engineering Core (26.25 credits)

See §71.20.5. Students in the BEng (Bldg) program shall replace ENGR 492 with BLDG 481.

Building Engineering Core		<i>Credits</i>
EMAT 332	Vector Calculus and Partial Differential Equations	3.00
ENGR 231	Computer Applications in Building and Civil Engineering	3.00
ENGR 232	Programming for Building and Civil Engineers I	2.00
ENGR 242	Statics	3.00
ENGR 243	Dynamics	3.00
ENGR 244	Mechanics of Materials	3.75
ENGR 251	Thermodynamics I	3.00
ENGR 342	Structural Analysis I	2.00
ENGR 343	Structural Analysis II	3.00
ENGR 344	Structural Design I	3.00
ENGR 345	Structural Design II	3.00
ENGR 361	Fluid Mechanics I	3.00
ENGR 451	Construction Engineering	3.00
BLDG 212	Building Engineering Drawing	3.00
BLDG 341	Building Engineering Systems	3.00
BLDG 365	Building Science	3.50
BLDG 366	Acoustics and Lighting	3.50
BLDG 371	Building Service Systems	3.50
BLDG 401	Building Economics	3.00
BLDG 459	Computer-Aided Building Design	3.00
BLDG 463	Building Envelope Design	3.00
BLDG 471	HVAC System Design	4.00
BLDG 476	Thermal Analysis of Buildings	3.00
BLDG 490	Capstone Building Engineering Design Project	4.00
CIVI 271*	Surveying	3.00
CIVI 321	Engineering Materials	3.75
CIVI 432	Soil Mechanics	3.50

84.50

*Summer course to be taken before entering second year of BEng program.

Elective Courses

A student must choose a minimum of nine credits from the following list of elective courses.

		<i>Credits</i>
ENGR 331	Programming for Building and Civil Engineers II	3.00
ENGR 452	Matrix Analysis of Structures	3.00
ENGR 455	Introduction to Structural Dynamics	3.00
BLDG 462	Modern Building Materials	3.00
BLDG 465	Fire and Smoke Control in Buildings	3.00
BLDG 472	Building Energy Conservation Technologies	3.00
BLDG 473	Building Acoustics	3.00
BLDG 474	Building Illumination	3.00
BLDG 475	Indoor Air Quality	3.00
BLDG 477	Control Systems in Buildings	3.00
BLDG 478	Project Management for Construction	3.00
BLDG 491	Labour and Industrial Relations in Construction	3.00
BLDG 492	Construction Processes	3.00
BLDG 493	Legal Issues in Construction	3.00
BLDG 498	Topics in Building Engineering	3.00
CIVI 435	Foundation Design	3.50
CIVI 453	Design of Reinforced Concrete Structures	3.50
CIVI 454	Design of Steel Structures	3.50

Objectives

Civil Engineering is concerned with the creation of systems of constructed facilities which play an important role in sound economic growth of society. It is also concerned with the development of technologies to combat pollution of air, water, and soil. Civil engineers are responsible for the design

of foundations and superstructures of common structures such as buildings, bridges, dams, tunnels, wharves, as well as many unusual structures such as rocket installations, containment vessels for nuclear reactors, supports for radio telescopes, frameworks for aircraft. In addition, they are concerned with the engineering aspects of water resources; transportation facilities; planning metropolitan areas, and conducting and managing their public facilities. In dealing with environmental problems, civil engineers perform vital functions such as monitoring and controlling air, water, and soil quality, assessing the impact of technological changes on the environment, and developing innovative waste reduction technologies.

71.50.2
Course Requirements

The program in Civil Engineering consists of the Engineering Core, the Civil Engineering Core, and one of the options described below. The normal length of the program is 117 credits.

Engineering Core (26.25 credits)

Students in the BEng (Civil) program must take ACCO 220 as one of the Complementary Studies courses. See §71.20.5.

Civil Engineering Core		Credits
EMAT 332	Vector Calculus and Partial Differential Equations	3.00
ENGR 231	Computer Applications in Building and Civil Engineering	3.00
ENGR 232	Programming for Building and Civil Engineers I	2.00
ENGR 242	Statics	3.00
ENGR 243	Dynamics	3.00
ENGR 244	Mechanics of Materials	3.75
ENGR 251	Thermodynamics I	3.00
ENGR 342	Structural Analysis I	2.00
ENGR 343	Structural Analysis II	3.00
ENGR 344	Structural Design I	3.00
ENGR 345	Structural Design II	3.00
ENGR 361	Fluid Mechanics I	3.00
ENGR 401	Engineering Economics and Management Principles	1.50
ENGR 451	Construction Engineering	3.00
CIVI 212	Civil Engineering Drawing	3.00
CIVI 231	Geology	2.75
CIVI 271*	Surveying	3.00
CIVI 321	Engineering Materials	3.75
CIVI 341	Civil Engineering Systems	3.00
CIVI 361	Introduction to Environmental Engineering	3.50
CIVI 372	Transportation Engineering	3.00
CIVI 381	Hydraulics	3.50
CIVI 382	Water Supply and Waste-Water Engineering	3.50
CIVI 432	Soil Mechanics	3.50
		<hr/> 71.75

*Summer course to be taken before entering second year of BEng program.

Option Course Requirements

Students must complete a minimum of 12.50 credits from one of Option A or Option B and with at least six additional credits from either option. Option A is designed for students interested in careers in structural, geotechnical, and transportation engineering. Option B is tailored for students wishing to pursue careers in environmental engineering.

Option A – General		Credits
ENGR 452	Matrix Analysis of Structures	3.00
ENGR 455	Introduction to Structural Dynamics	3.00
CIVI 435	Foundation Design	3.50
CIVI 437	Advanced Geotechnical Engineering	3.00
CIVI 453	Design of Reinforced Concrete Structures	3.50
CIVI 454	Design of Steel Structures	3.50
CIVI 471	Highway and Pavement Design	3.50
CIVI 474	Transportation Planning and Design	3.00

Option B – Environmental

Credits

CIVI 464	Environmental Impact Assessment	3.00
CIVI 465	Water Pollution and Control	3.50
CIVI 466	Engineering Aspects of Chemical and Biological Processes	3.00
CIVI 467	Air Pollution and Emission Control	3.00
CIVI 468	Waste Management	3.00
CIVI 469	Geo-Environmental Engineering	3.50
CIVI 483	Hydrology	3.50
CIVI 484	Hydraulic Engineering	3.50

71.50.3

*The Co-operative
Format*

Director

RADU ZMEUREANU, Associate Professor

Students entering the program leading to the BEng degree in Building or Civil Engineering may request permission to undertake their studies in the co-op format by following the application procedure specified in §24.

Academic content is identical to that of the regular program, but seven Study terms are interspersed with four Work terms. Students in Building or Civil Engineering will complete between 15 and 18 credits in each Study Term to obtain the required 119.75 or 117 credits for a BEng (Building or Civil, respectively).

Students are supervised personally and must meet the requirements specified in §71.10.8 in order to continue their studies in the co-op format.

Liaison between the student, the employers and the Institute for Co-operative Education is provided by the Building and Civil Engineering co-op committee, which includes the student's advisers.

Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

71.60

ENGINEERING COURSE DESCRIPTIONS

ENGINEERING MATHEMATICS

EMAT 212 *Calculus and Differential Equations* (3 credits)

Prerequisite: MATH 204 (cégep Mathematics 105) previously or concurrently; MATH 205 (cégep Mathematics 203). Introduction to ordinary differential equations with applications to engineering problems. Functions of several variables: differentiation and multiple integrals. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for EMAT 213 or 233 may not take this course for credit.

EMAT 213 *Ordinary Differential Equations* (3 credits)

Prerequisite: MATH 204 (cégep Mathematics 105) previously or concurrently; MATH 205 (cégep Mathematics 203). Complex numbers. Solution of linear differential equations with constant coefficients. Differential operator. Homogeneous equation, characteristic equation, real and complex roots. Particular integral. Forced and free response, exact equations, integrating factors (function of one variable only), Euler-Cauchy equation, solution by variation of parameters, forced oscillations. Motivation for series solution of differential equations. Taylor series, convergence, ratio test, integral test, comparison test, remainder estimation. Reduction of n 'th order differential equation to matrix form. Eigenvalues and eigenvectors. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for EMAT 212 and 232 may not take this course for credit.

EMAT 232 *Matrices and Advanced Calculus* (3 credits)

Prerequisite: EMAT 212 previously or concurrently. Review of matrix algebra; solution of systems of linear differential equations with examples drawn from physical systems; vector spaces, characteristic value problems, Cayley-Hamilton theorem with applications. Vector calculus: gradient, divergence, Curl, Green's theorem. Divergence theorem, Stokes theorem. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for EMAT 213 or 233 may not take this course for credit.

EMAT 233 *Advanced Calculus* (3 credits)

Prerequisite: MATH 204 (cégep Mathematics 105); MATH 205 (cégep Mathematics 203). Functions of several variables, partial derivatives,

higher order partial derivatives, differentials, total and exact differentials, approximations with differentials. Tangent plane and normal line to a surface, directional derivatives, gradient. Double integrals, polar coordinates, transformation of double integrals. Triple integrals, cylindrical and spherical coordinates, transformation of triple integrals. Vector differential calculus: divergence, curl, curvature, line integrals, Green's theorem, surfaces, surface integrals, divergence theorem, applications of divergence theorem, Stokes' theorem. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for EMAT 212 and 232 may not take this course for credit.

EMAT 252 *Complex Variables* (3 credits)

Prerequisite: EMAT 212; EMAT 232 previously or concurrently. Algebra of complex numbers in Cartesian and polar forms; functions and inverse functions of complex variables. Derivatives and Cauchy-Riemann, analytic and harmonic functions. Exponential, trigonometric, hyperbolic, and logarithmic functions. Complex line integrals, Cauchy-Goursat theorem, Cauchy integral formula. Taylor's and Laurent's series. Residue theorem and applications. Lectures: three hours per week.

EMAT 311 *Transform Calculus and Partial Differential Equations* (3 credits)

Prerequisite: EMAT 213, 233. Elements of complex variables. The Laplace transform: Laplace transforms and their properties, solution of linear differential equations with constant coefficients. Further theorems and their applications. The Fourier transform: orthogonal functions, expansion of a function in orthogonal functions, the Fourier series, the Fourier integral, the Fourier transform, the convolution theorem. Partial differential equations: physical foundations of partial differential equations, introduction to boundary value problems. Lectures: three hours per week.

EMAT 332 *Vector Calculus and Partial Differential Equations* (3 credits)

Prerequisite: EMAT 232. Review of vector calculus. Partial differential equations. Boundary value problems. Separation of variables. Fourier series solutions in one and two dimensions. Laplace and Poisson equations. One- and two-dimensional wave equations in orthogonal coordinate systems. Scalar and vector potentials and fields. Examples from heat flow, electrostatics and magnetostatics. Bessel and Legendre functions. Power series solutions; method of Frobenius. Applications: vibrating string, vibrating membrane in rectangular and cylindrical coordinates. Sturm-Liouville problem. Eigenvalues and eigenfunctions.

Lectures: three hours per week.
NOTE: Students who have received credit for EMAT 312 may not take this course for credit.

EMAT 391 Numerical Methods in Engineering (3 credits)

Prerequisite: EMAT 232, 233; COEN 243 or equivalent. Roots of algebraic and transcendental equations; function approximation; numerical differentiation; numerical integration; solution of simultaneous algebraic equations; numerical integration of ordinary differential equations. Lectures: three hours per week. Tutorial: one hour per week.

ENGINEERING AND COMPUTER SCIENCE

ENCS 245 Mechanical Analysis (3 credits)

Prerequisite: PHYS 204 and PHYS 224 (cégep Physics 101); EMAT 212 previously or concurrently. Forces in a plane and in space, moments of forces, Varignon's theorem, rigid bodies in equilibrium, free-body diagram. Centroids, centres of gravity. Distributed forces, moments of inertia. Principle of virtual work. Kinematics of particles and rigid bodies. Forces and accelerations; work and energy; impulse and momentum. Kinetics of particles and rigid bodies. Lectures: three hours per week. Tutorial: one hour per week.

ENCS 281 Technical Writing (2 credits)

Technical writing form and style. Technical and scientific papers, abstracts, reports. Library research and referencing methods. Business communications. Students may be required to attend tutorial writing workshops based on the results of placement tests administered at the start of the course. Lectures: two hours per week. Tutorial: two hours per week.

ENCS 282 Technical Writing and Communication (3 credits)

Technical writing form and style. Technical and scientific papers, abstracts, reports. Library research and referencing methods for engineers and computer scientists. Technical communication using information technology: document processing software, computer-assisted presentation, analysis and design of Web presentation, choice and use of appropriate tools. Students will prepare an individual major report and make an oral presentation. Students may be required to attend tutorial writing workshops based on the results of placement tests administered at the start of the course. Lectures: three hours per week. Laboratory: two hours per week.
NOTE: Students who have received credit for ENCS 281 may not take this course for credit.

ENCS 410 Social Issues in Computers and Information Technology (3 credits)

Prerequisite: ENCS 281; SOEN 341. Characteristics of information technology; end-user computing; cyberspace applications. Social issues, including differences between

software engineering and other engineering disciplines. Security, privacy, and accountability. Moral, ethical, and legal issues. Impact of computer technology on individuals and social groups: life, work, leisure, and interactions. Conflicts and trade-offs; lessons from history. Lectures: three hours per week.

ENCS 454 VLSI Design I (4 credits)

Prerequisite: COEN 312 or COMP 327; ELEC 311. Review of IC development and realization of logic elements. CMOS inverter, logic levels, power and speed considerations, area of implementation. Electrical analysis using SPICE, input, output, delay time and loading. CMOS NAND/NOR gates, fan-out limitations, and layout considerations. Simple CMOS process, design rules, and layout exercises. CMOS logic system design and analysis using SPLICE. Logic simulation and testing specification of input, output, and delay for fault simulation. Other CAD facilities for logic simulation and testing. Gate arrays and semi-custom CMOS design considerations. CMOS dynamic VLSI circuits; CMOS memories. NMOS dynamic and static circuit design; NMOS memories. Hierarchical approach to digital design of VLSI circuits. Lectures: three hours per week. Laboratory: two hours per week.

ENCS 455 VLSI Design II (4 credits)

Prerequisite: ENCS 454. Hardware description language (VHDL). Modelling with VHDL and Verilog. Synthesis techniques. Behavioural and RTL synthesis. Programmable logic, Devices (PLD), synthesis with PLD. Applications. Lectures: three hours per week. Laboratory: two hours per week.

ENCS 456 VLSI Process Technology (3.75 credits)

Prerequisite: ELEC 311, 321. Introduction to basic VLSI technologies; crystal growth, thermal oxidation, diffusion, ion implantation, chemical vapour deposition, wet and dry etching, and lithography. Layout, yield, and VLSI process integration. The lab demonstrates a semiconductor device fabrication process. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ENCS 472 Robot Manipulators (3.75 credits)

Prerequisite: ENGR 372. Spatial descriptions and transformations. Manipulator forward and inverse kinematics. Jacobians: velocities and static forces. Manipulator dynamics. Trajectory generation. Position control of manipulators. Force control of manipulators. Robot programming languages. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ENGINEERING

ENGR 231 Computer Applications in Building and Civil Engineering (3 credits)

Prerequisite: MATH 204 (cégep Mathematics

105); COMP 201. Application of computers for solution of problems from various areas of building and civil engineering that involve the use of software including high-level scripting languages, spreadsheets, databases and CAD systems. Program structure and development: specifications, analysis of requirements, flow charting, incremental development, testing, validation and program documenting. Lectures: two hours per week. Laboratory: two hours per week.

ENGR 232 *Programming for Building and Civil Engineers I* (2 credits)

Prerequisite: ENGR 231. Elements of procedural programming: variables, primitive data types, scope, operators and expressions, control structures, functions, derived data types and basic data structures. Use of numerical tool box for engineering applications. Application examples and assignments will be drawn from building and civil engineering science. Lectures: two hours per week. Tutorial: one hour per week.

ENGR 242 *Statics* (3 credits)

Prerequisite: EMAT 213; EMAT 233 previously or concurrently; PHYS 204 and PHYS 224 (cégep Physics 101); MATH 204 (cégep Mathematics 105). Resultant of force systems; equilibrium of particles and rigid bodies; distributed forces; statically determinate systems; trusses; friction; moments of inertia; virtual work. Shear and bending moment diagrams. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 243 *Dynamics* (3 credits)

Prerequisite: EMAT 212; ENGR 242. Kinematics of a particle and rigid body; forces and accelerations; work and energy; impulse and momentum; dynamics of a system of particles and rigid bodies, introduction to vibrations. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 244 *Mechanics of Materials* (3.75 credits)

Prerequisite: ENGR 242; EMAT 213; EMAT 233 previously or concurrently. Mechanical behaviour of materials; stress; strain; shear and bending moment diagrams; introduction to inelastic action. Analysis and design of structural and machine elements subjected to axial, torsional, and flexural loadings. Combined stresses and stress transformation. Deflections. Introduction to elastic stability. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week, alternate weeks.

ENGR 251 *Thermodynamics I* (3 credits)

Prerequisite: MATH 203 (cégep Mathematics 103). Basic principles of thermodynamics and their application to various systems composed of pure substances and their homogeneous non-reactive mixtures. Simple power production and utilization cycles. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 273 *Basic Circuit Analysis* (3.75 credits)

Prerequisite: EMAT 212 previously or concurrently; PHYS 205 previously; PHYS 225 previously or concurrently or cégep Physics 201. Units: current, voltage, power, and energy. Elementary wave-forms. Time averages. Ohm's law. KVL and KCL. Ideal sources. Mesh and node analysis of resistive circuits. Network theorems. Inductors and capacitors and their response to the application of elementary waveforms. Transient response of simple circuits. Natural frequency and damping. Initial conditions. Steady state AC analysis: resonance, impedance, power factor. Introduction to three phase power, delta and Y connections. Ideal operational amplifiers. Ideal transformers. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week, alternate weeks.

ENGR 275 *Principles of Electrical Engineering* (3.75 credits)

Prerequisite: EMAT 212 or 213 previously or concurrently. Fundamentals of electric circuits: Kirchhoff's laws, voltage and current sources, Ohm's law, series and parallel circuits. Nodal and mesh analysis of DC circuits. Superposition theorem, Thevenin and Norton Equivalents. Use of operational amplifiers. Transient analysis of simple RC, RL and RLC circuits. Steady state analysis: Phasors and impedances, power and power factor. Single and three phase circuits. Magnetic circuits and transformers. Power generation and distribution. Tutorial: one hour per week. Laboratory: three hours per week, alternate weeks.

ENGR 331 *Programming for Building and Civil Engineers II* (3 credits)

Prerequisite: ENGR 232. Fundamentals of object-oriented programming: class definition, data and function members, constructors and destructors; derived classes; inheritance, polymorphism, class libraries; concepts of software engineering. Project on software design for building and civil engineering applications. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 342 *Structural Analysis I* (2 credits)

Prerequisite: ENGR 244 previously or concurrently. Analysis of statically determinate structures: deflections, strain energy concepts, virtual work principles. Mueller Breslau principle, influence lines. Approximate methods for statically indeterminate structures. Collapse load analysis. Computer applications. Lectures: two hours per week. Tutorial: one hour per week.

ENGR 343 *Structural Analysis II* (3 credits)

Prerequisite: ENGR 342. Analysis of statically indeterminate structures: the methods of consistent deformations, slope deflection, and moment distribution. Application of virtual work principles. Introduction to matrix methods. Computer applications. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 344 Structural Design I (3 credits)

Prerequisite: ENGR 342 previously or concurrently. Basis for limit states design. Code requirements. Structural steel design: tension and compression members, beams and beam-columns. Connections. Introduction to the design of timber members. Lectures: two hours per week. Laboratory: two hours per week.

ENGR 345 Structural Design II (3 credits)

Prerequisite: ENGR 342 previously or concurrently. Reinforced concrete behaviour in flexure, compression, shear, and bond. Ultimate strength design of reinforced concrete beams, columns, walls, and footings. Introduction to prestressed concrete and masonry. Lecture: two hours per week. Laboratory: two hours per week.

ENGR 361 Fluid Mechanics I (3 credits)

Prerequisite: EMAT 213, 233; ENGR 251. Basic concepts and principles of fluid mechanics. Classification of fluid flow. Hydrostatic forces on plane and curved surfaces, buoyancy and stability, fluids in rigid body motion. Mass, momentum, and energy conservation integral equations. Bernoulli equation. Basic concepts of pipe and duct flow. Introduction to Navier-Stokes equations. Similarity and model studies. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 370 Modelling and Analysis of Physical Systems (3.75 credits)

Prerequisite: EMAT 311 or ELEC 361 previously or concurrently; ENGR 273 or 275. Definition and classification of physical systems. Definition of through and across variables. Modelling of system components: electrical, mechanical, fluid, and thermal. Limits of linear models and linear representations of nonlinear components. Modelling of systems including mixed systems. Analysis techniques: review of first and second order systems; mesh and nodal analysis in the Laplace transform domain; impedance and transfer functions; two-port parameters; indefinite admittance matrix; signal flow graphs; identification of analysis techniques used for SPICE. Fundamentals of frequency response: introduction to filters; Butterworth and Chebyshev filter functions. Introduction to state variable analysis. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week, alternate weeks.

NOTE: Students who have received credit for ENGR 274 or ELEC 341 may not take this course for credit.

ENGR 371 Probability and Statistics in Engineering (3 credits)

Prerequisite: EMAT 213, 233. Axioms of probability theory. Events. Conditional probability. Bayes theorem. Random variables. Mathematical expectation. Discrete and continuous probability density functions. Transformation of variables. Probabilistic models, statistics, and elements of hypothesis testing (sampling distributions and interval estimation). Introduction to statistical

quality control. Applications to engineering problems. Lectures: three hours per week.

ENGR 372 Fundamentals of Control Systems (3.75 credits)

Prerequisite: ENGR 370. Mathematical models of control systems. Characteristics, performance, and stability of linear feedback control systems. Root-locus methods. Frequency response methods. Stability in the frequency domain. Design and compensation of feedback control systems. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ENGR 401 Engineering Economics and Management Principles (1.5 credits)

Prerequisite: ENGR 371. This course is presented in relation to the practice of engineering and includes the following topics: role and activities of the manager. Enterprises and organizations; organizational modes. Planning and control; principles and practice of decision-making. Interest and the time value of money; expected value and decision trees. Capital expenditure appraisal, discounted cash flow, and other methods. Sensitivity analysis. Lectures: one and a half hours per week. *NOTE: Students who have received credit for ENGR 403 may not take this course for credit.*

ENGR 402 Engineering Law (1.5 credits)

Prerequisite: BLDG 401 or ENGR 401 or INDU 313 previously or concurrently. The application of Québec laws such as those pertaining to property, to engineers and related professionals; the extent of right of ownership and restrictions thereon, including legal and conventional servitudes, usufruct, building and zoning by-laws; civil responsibility and contracts generally with emphasis on engineering and construction contracts, standard clauses and rights and duties of the parties. Health and safety regulations in the construction industry and the jurisdiction of various tribunals. Corporations — responsibilities of directors and officers. Employment contracts and agency. A review of the relevant provisions of the Québec Professional Code and the Engineers Act. A delegate from l'Ordre des Ingénieurs du Québec gives two lectures explaining the structure and scope of the professional organization and especially professional ethics. Lectures: one and a half hours per week.

ENGR 410 Technical Report (1.5 credits)

Prerequisite: ENCS 281. Students in the BEng program must submit a technical report on entering their final year. The report must be from 2,000 to 5,000 words long, on a topic closely related to the student's discipline. The report must present a review of a current engineering problem, a proposal for a design project, or a current engineering practice; a student's summer work may provide a suitable basis. Students are responsible for acquiring a complete set of instructions and the document

Form and Style in the spring before entering the final year of the BEng program. These documents are available from the Office of Student Affairs of the Faculty.

NOTE 1: Students must discuss their proposed topic with a faculty member in their Department, and obtain departmental approval of the proposed topic prior to registration for the course.

NOTE 2: Students in the Mechanical and Industrial Engineering programs must take this course concurrently with MECH 490 or INDU 490 respectively.

NOTE 3: Students in the Software Engineering program must take this course concurrently with SOEN 490.

NOTE: Students who have received credit for ENGR 411 may not take this course for credit.

ENGR 411 Project Technical Report
(1 credit)

Prerequisite: ENCS 281; one of BLDG 490, COEN 490, ELEC 490 taken concurrently. Students in the BEng program must submit a project report associated with their final-year project course. While a portion of the requirements for the written report will depend on the associated project course for which the student is registered, the report should also conform to the set of instructions available through the departmental offices or the Office of Student Affairs of the Faculty.

NOTE: Students who have received credit for ENGR 410 may not take this course for credit.

ENGR 451 Construction Engineering
(3 credits)

Prerequisite: BLDG 341 or CIVI 341. The nature of construction and the environment in which the industry works; organizational structures for project delivery; construction contracts and documents; introduction to construction processes: excavation and site works, foundation layout, concrete form design, concrete, steel, timber, and masonry construction; project planning, scheduling, and control; construction safety. Lectures: three hours per week.

ENGR 452 Matrix Analysis of Structures
(3 credits)

Prerequisite: EMAT 232; ENGR 343. Classical and matrix methods of structural analysis; influence coefficients, transformation matrices. Matrix formulation of the force and of the displacement methods of analysis. Direct stiffness approach; sub-structure technique. Introduction to finite-element method. Computer applications. Lectures: three hours per week.

ENGR 455 Introduction to Structural Dynamics (3 credits)

Prerequisite: EMAT 391; ENGR 243, 342. Theory of vibration. Dynamic response of simple structural systems. Effects of blast, wind, traffic, and machinery vibrations. Basic concepts in earthquake resistant design. Computer applications. Lectures: three hours per week.

ENGR 460 Finite Element Analysis
(3.75 credits)

Prerequisite: EMAT 391; ENGR 244 or ENCS 245. Formulation and application of the finite element method to modelling of engineering problems, including stress analysis, vibrations, and heat transfer. Examples illustrating the direct approach, as well as variational and weighted residual methods. Elements and interpolation functions. Meshing effect. Error analysis. One- and two-dimensional boundary value problems. Development of simple programs and direct experience with general purpose packages currently used in industry for design problems. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ENGR 471 Linear Systems (3.75 credits)

Prerequisite: ENGR 372. Review of matrix algebra. State-space description of dynamic systems: linearity, causality, time-invariance, linearization. Solution of state-space equations. Transfer function representation. Discrete-time models. Controllability and observability. Canonical forms and minimal-order realizations. Stability. Stabilizability and pole placement. Linear quadratic optimal control. Observer design. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ENGR 472 System Optimization
(3.75 credits)

Prerequisite: EMAT 391. Linear least squares. Properties of quadratic functions with applications to steepest descent method, Newton's method and Quasi-Newton methods for non-linear optimization. One-dimensional optimization. Introduction to constrained optimization, including the elements of Kuhn-Tucker conditions for optimality. Least p^{th} and mini-max optimization. Application of optimization techniques to engineering problems. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ENGR 473 Control System Design
(3.5 credits)

Prerequisite: ENGR 372. A course in industrial control design procedures by case study, including practical sensing, control, and actuating elements; optimization of system performance by choice of components and compensation; nonlinearities, introduction to multi-loop systems. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

ENGR 475 Process Dynamics and Control
(3.75 credits)

Prerequisite: ENGR 372. Dynamics of mechanical and chemical processes; system capacity; resistance; piping complexes; characteristics and dynamics of control valves; process time constants; proportional, reset, and derivative control actions; feedforward and cascade control; direct digital control. Case studies on liquid-level

control, temperature, and heat exchanger control. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

SOCIAL ASPECTS OF ENGINEERING

ENGR 491 *Engineers and Society* (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng program. Sociological analysis of the interaction between the engineering profession and society, the development of the profession, growth of technical societies, trends in engineering and engineering technology education, relationship to other professions. Role of engineers in Canadian industry, government, and industrial research. Lectures: three hours per week.

ENGR 492 *Impact of Technology on Society* (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng program. Social history of technology and of science including ancient and medieval periods, industrial revolution, and modern times. Engineering and scientific creativity, social and environmental problems created by uncontrolled technology, appropriate technology. Lectures: three hours per week.

ENGR 493 *Engineering, Resources and Environment* (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng program. Sources, consequences and control of air, water, noise, solid, and radiation pollution. Management of mineral and energy resources. Conservation of resources through engineering efficiency, recycling, and communal practices. Renewable resources. Case studies of engineering projects. Lectures: three hours per week.

ENGR 494 *Effect of Technology on the Person* (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng program. Psychological effects of various technologies. Changes in personal, family, and community values arising from various patterns of industrial development. Enhancement of personal development by technology, adaptation of the machine to humanity. Lectures: three hours per week.

ENGR 495 *Technology Assessment and Control* (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng program. The organization of mechanisms and institutions to control and mediate the unwanted and unanticipated side-effects of contemporary technology. Environmental impact assessment, analysis of industrial health and safety, risk analysis. Technological forecasting, future studies, appropriate technology, the conserver society. Relationships of technology assessment to science policy, resource planning, and energy strategy. Lectures: three hours per week.

ENGR 496 *Science Policy and Engineering Innovation* (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng

program. An analysis of the basic concepts in science and technology policy, including the allocation of resources; research and development; invention, innovation, and diffusion. The social impact of policy decisions and the structure and programs of government organizations involved in the field. Of particular concern will be issues such as foreign ownership; science and technology development within a regional context; the role of government, industry, and the universities within a balanced science and technology policy. Lectures: three hours per week.

ENGR 497 *The Management of Transition to an Information Society* (3 credits)

Prerequisite: ENCS 281; 20 courses in BEng program. Understanding the social role of the new technologies of the information machine, the emerging information society, the rate of adoption of new technologies, the implications of the information machines for global societies. The effects of the new technology on the structure of decision-making process. Lectures: three hours per week.

BUILDING ENGINEERING

BLDG 212 *Building Engineering Drawing* (3 credits)

Fundamentals of technical drawing, dimensioning practices, orthographic projections, auxiliary and sectional views of buildings. Theory and applications of descriptive geometry in building design. Computer-aided building drawing. Building sub-systems and related graphics standards; architectural and building engineering drawing at preliminary and final stages. Introduction to the design of light-frame buildings. Project: representation of a building and its sub-systems. Lectures: two hours per week. Laboratory: two hours per week. Tutorial: one hour per week. *NOTE: Students who have received credit for BLDG 211 may not take this course for credit.*

BLDG 341 *Building Engineering Systems* (3 credits)

Prerequisite: COMP 212; EMAT 232 previously or concurrently. Introduction to systematic solution of building engineering problems. Techniques treated include linear programming, network analysis, nonlinear programming. Introduction to decision analysis and simulation. Application of optimization methods for solution of design problems in building science, building environment, building structures, and construction management. Lectures: three hours per week.

BLDG 365 *Building Science* (3.5 credits)

Prerequisite: ENGR 251; ENGR 361 previously or concurrently. General introduction to the thermal environment. Topics include heat, temperature, one-dimensional steady-state processes. Convection: natural and forced. Radiation. Combined radiative and convective surface transfer. Psychrometrics. Thermal

comfort. Air quality. Condensation: surface and interstitial. Introduction to compressible viscous flow, friction, and flow in pipes; boundary layer and wind effects. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for BLDG 364 may not take this course for credit.

BLDG 366 *Acoustics and Lighting*
(3.5 credits)

Prerequisite: ENGR 243. General introduction to the aural and visual environment. Psychological impact of environment. Subjective and objective scales of measurement. Introduction to vibration. The hearing mechanism. Transmission of sound, passive control of noise in buildings, transmission loss, absorption and reverberation time. Room acoustic assessment. Active control of the aural environment. Visual perception. Photometry, brightness, luminance, and illumination. Concept of natural lighting in building. Artificial lighting; light sources; luminaries. Calorimetry. Calculation methods for artificial lighting. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.
NOTE: Students who have received credit for BLDG 363 may not take this course for credit.

BLDG 371 *Building Service Systems*
(3.5 credits)

Prerequisite: BLDG 365. Principles of building service systems, including electrical, gas, communications, service-water supply and distribution; introduction to plans, codes, and standards for utility distribution systems. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

BLDG 401 *Building Economics* (3 credits)

Prerequisite: BLDG 341 previously or concurrently. Development of economic performance measures of interest to developers, owners, contractors, and users. Sources of finance and the determinants of the cost of money. Treatment of life cycle costing, economic risk; tax regulation, inflation, forecasting techniques; model building, cost indices, elemental estimating, computerized information systems. Consideration of economic analyses of projects, single buildings, and building components. Lectures: three hours per week.

BLDG 459 *Computer-Aided Building Design* (3 credits)

Prerequisite: BLDG 341; BLDG 401 previously or concurrently. Building engineering design process: methodology, identification of objectives, building codes, formulation of design problems. Development and evaluation of design alternatives. Conceptual building design: spatial requirements, design of space layout. Preliminary building design: synthesis and design of structures, enclosure systems, and services (HVAC, lighting, electrical distribution) using computer-aided design tools. Performance evaluation using

modelling, sensitivity analysis and cost estimation. A major design project is an integral part of this course. Lectures: three hours per week.

BLDG 462 *Modern Building Materials*
(3 credits)

Prerequisite: CIVI 321. Engineering properties of building materials such as: plastics, synthetic fibres, adhesives, sealants, caulking compounds, foams, sandwich panels, composites, polymer concrete systems, fibre-reinforced concretes, plastic mortars, polymers for flooring, roofing, synthetic wall papers. Their structural, thermal, and acoustical properties. Consideration of corrosion, bio- and thermal-degradation, stability to ultraviolet and solar radiation. Laboratory sessions to illustrate synthesis, application, testing, deterioration, and protection. Lectures: three hours per week.

BLDG 463 *Building Envelope Design*
(3 credits)

Prerequisite: BLDG 365; CIVI 321. Technical influences in the design of building envelope, including the control of heat flow, air and moisture penetration, building movements, and deterioration. Application of air/vapour barrier and rain-screen systems. Performance assessment and building codes through case studies and design projects. Design of walls, roofs, joints and assemblies. Cause of deterioration and preventive measures, on-site investigation. Relevant building codes and standards. Lectures: three hours per week.

NOTE: Students who have received credit for BLDG 461 may not take this course for credit.

BLDG 465 *Fire and Smoke Control in Buildings* (3 credits)

Prerequisite: BLDG 365, 366. Topics treated include fire and smoke control; failure mechanisms of building enclosure illustrated by case studies; code requirements for enclosure systems; systems approach for fire safety. Lectures: three hours per week.

BLDG 471 *HVAC System Design* (4 credits)

Prerequisite: BLDG 371; BLDG 476 previously or concurrently. Principles of HVAC system design and analysis; component and system selection criteria including room air distribution, fans and air circulation, humidifying and dehumidifying processes, piping and ducting design. Air quality standards. Control systems and techniques; operational economics; computer applications. Lectures: three hours per week. Laboratory: two hours per week.

BLDG 472 *Building Energy Conservation Technologies* (3 credits)

Prerequisite: BLDG 471 previously or concurrently. Standards of energy efficiency in buildings. Trends in energy consumption. Energy audit: evaluation of energy performance of existing buildings, weather normalization methods, measurements, disaggregation of total energy consumption, use of computer models, impact

of people behaviour. Energy efficiency measures in buildings: approaches, materials and equipments, operating strategies, evaluation methods of energy savings. Renewable energy sources: passive or active solar systems, geothermal systems, free-cooling. Optimum selection of energy sources. Impact of emerging technologies. Case studies. Lectures: three hours per week.

BLDG 473 *Building Acoustics* (3 credits)
Prerequisite: BLDG 363. Noise control criteria and regulations, instrumentation, noise sources, room acoustics, walls, barriers and enclosures, acoustical materials and structures, vibration and noise control systems for buildings. Lectures: three hours per week.

BLDG 474 *Building Illumination* (3 credits)
Prerequisite: BLDG 363. Production, measurement and control of light, design of lighting systems. Design in respect to daylighting. Integration of lighting systems with mechanical systems. Lectures: three hours per week.

BLDG 475 *Indoor Air Quality* (3 credits)
Prerequisite: BLDG 371 previously or concurrently. Elements of indoor air quality, physical/chemical characteristics of contaminants, health effects, standard requirements. Estimation of the levels of indoor air contaminants in buildings. Design of ventilation systems for pollutant control. Air pollution due to outdoor air supply through ventilation systems. Effect of outdoor air pollution on indoor air quality. Lectures: three hours per week.

BLDG 476 *Thermal Analysis of Buildings* (3 credits)
Prerequisite: BLDG 364. Two- and three-dimensional steady-state and transient conductive heat transfer together with convection and radiation as applied to building materials and geometries. Heating and cooling load analysis, including building shapes, construction type, solar radiation, infiltration, occupancy effects, and daily load variations. Computer applications for thermal load analysis. Introduction to heat exchangers. Lectures: three hours per week.

BLDG 477 *Control Systems in Buildings* (3 credits)
Prerequisite: BLDG 371 previously or concurrently. Introduction to automatic control systems. Control issues related to energy conservation, indoor air quality and thermal comfort in buildings. Classification of HVAC control systems. Control system hardware: selection and sizing of sensors, actuators and controllers. Practical HVAC control systems; elementary local loop and complete control systems. Designing and tuning of controllers. Building automation systems. Case studies. Lectures: three hours per week.

BLDG 478 *Project Management for Construction* (3 credits)
Prerequisite: BLDG 341. Introduction to project

management techniques in construction, including project delivery methods, construction contracts, cost estimating and bidding planning and scheduling, cash flow analysis, project tracking and control, computer applications. Lectures: three hours per week.

BLDG 481 *Architectural Appreciation and Design* (3 credits)
Prerequisite: 20 courses in the BEng program. Historical and modern architectural theories. Meaning, intentions, and formal issues in contemporary design. The influence of technology, energy conservation, and environmental constraints on built form. Architecture vs. industrial design. Lectures: three hours per week.

BLDG 490 *Capstone Building Engineering Design Project* (4 credits)
Prerequisite: Final-year standing in the BEng (Bldg) program or permission of the Department; ENGR 411 concurrently. The project of each team will encompass the integrated design of at least three sub-systems of a new or retrofitted building to achieve high performance and efficiency at reasonable cost. In the process, students will learn, through case studies and literature survey, the information gathering and decision/design process, problem-resolution as well as aspects related to management, teamwork and communication. Students registering for this course must contact the course coordinator for the detailed procedure. Lectures: two hours per week, two terms.

BLDG 491 *Labour and Industrial Relations in Construction* (3 credits)
Prerequisite: ENGR 451. The study of labour legislation with special emphasis on the construction industry, union organization, the theory and practice of negotiations, mediation, contract administration, and arbitration. Review of actual contracts, discussion of future trends. Lectures: three hours per week.

BLDG 492 *Construction Processes* (3 credits)
Prerequisite: ENGR 451. A study of current construction methods and techniques. The subjects include site preparation and earthwork, wood framing, masonry, concrete forming, slip forming, precast construction, industrialized building, deep excavation shoring and underpinning. Design, erection, and removal of temporary construction work. Current field practice and safety considerations. Site visits. Lectures: three hours per week.

BLDG 493 *Legal Issues in Construction* (3 credits)
Prerequisite: ENGR 451. Legal concepts and processes applicable to the development of constructed facilities and to the operation of the construction firm. Emphasis on Québec law and institutions. Lectures: three hours per week.

BLDG 498 *Topics in Building Engineering*
(3 credits)

Prerequisite: Permission of the Department. This course may be offered in a given year upon the authorization of the Department. The course content may vary from offering to offering and will be chosen to complement the available elective courses. Lectures: three hours per week.

CIVIL ENGINEERING

CIVI 212 *Civil Engineering Drawing*
(3 credits)

Fundamentals of technical drawing, dimensioning practice, orthographic projections, auxiliary and sectional views. Theory and applications of descriptive geometry in civil engineering. Computer-aided drawing and applications to the preparation of working drawing of steel and concrete structures. Lectures: two hours per week. Tutorial: one hour per week. Laboratory: two hours per week. *NOTE: Students who have received credit for CIVI 211 may not take this course for credit.*

CIVI 231 *Geology* (2.75 credits)

Basic principles of physical and structural geology with emphasis on topics related to civil engineering, study of minerals, rocks and soil types, load formation, techniques of air-photo interpretations, and geological maps. Lectures: two hours per week. Laboratory: three hours per week, alternate weeks.

CIVI 271 *Surveying* (3 credits)

Elementary operations employed in engineering surveying; use, care, and adjustment of instruments; linear and angular measurements; traversing; earthwork calculations; theory of errors; horizontal and vertical curves and curve layout; slope stakes and grades, application of surveying methods to city, topographic surveying, and introduction to advanced surveying techniques; use of digital computers in surveying calculations. Summer school taken before entering second year of study in the BEng program. Lectures and fieldwork: eight hours per day; six days per week for three weeks.

CIVI 321 *Engineering Materials*
(3.75 credits)

Linear and nonlinear material behaviour, time-dependent behaviour; structural and engineering properties of structural metals; behaviour of wood; production and properties of concrete; bituminous materials, ceramics, plastics; introduction to composite materials. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

CIVI 341 *Civil Engineering Systems*
(3 credits)

Prerequisite: ENGR 371 previously or concurrently; COMP 212. Development of concepts and techniques commonly associated with systems engineering which are applicable to design and operation of systems that concern civil engineers. Design and planning process; problem formula-

tion, optimization concepts, linear programming, decision analysis; system simulation; network planning and project scheduling; computer applications. The techniques developed are used to solve problems in transportation, water resources, structures, and construction management. Lectures: three hours per week.

CIVI 361 *Introduction to Environmental Engineering* (3.5 credits)

Prerequisite: ENGR 361. Ecosystems considerations, food chain, natural decomposition, and recycling; environmental problems and impact of engineering activities. Various modes of pollution, water, air, and soil contamination, noise pollution; pollution measurement and quantification. Water and waste-water physical, chemical and biological characteristics; turbidity and colour, dissolved oxygen, hardness, pH, alkalinity, organic content, sampling and analysis, chemical and biochemical oxygen demand. Basic processes of treatment: flocculation and coagulation, sedimentation, filtration. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

CIVI 372 *Transportation Engineering*
(3 credits)

Prerequisite: CIVI 341. Fields of transportation engineering; transportation's roles in society; planning and design of road, rail, air, and waterway system components: terminals, right-of-way; control systems: evaluation of alternative modes and decision-making process; introduction to computer-aided design and management of systems. Lectures: three hours per week. Tutorial: one hour per week.

CIVI 381 *Hydraulics* (3.5 credits)

Prerequisite: ENGR 361. Basic hydrodynamics; boundary layer theory, principle of energy losses. Steady flow in open channel; uniform flow, specific energy and critical flow, transition; non-uniform flow, water surface profiles, computer applications. Flow measurement in open channel, weirs, overflow spillways. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 382 *Water Supply and Waste-Water Engineering* (3.5 credits)

Prerequisite: CIVI 381; EMAT 391. Characteristics of water and waste water. Water use cycle; population forecast, water demands. Sources of waters, surface water, ground water, water quantities and requirements. Water supply network analysis, design of distribution systems, storage, pumping. Sanitary and storm water quantities, urban hydrology. Design of sewer systems, interceptors, gravity sewers, computer applications. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 432 *Soil Mechanics* (3.5 credits)

Prerequisite: ENGR 244. Index properties and classification of soils. Weight-volume relationships. Soil structures. Moisture-density relationships. Permeability, deformation, and strength of soils. Principle of total and effective stresses.

Steady stage seepage through isotropic soil media. Stress distribution due to external loads and analysis of total settlements. Outline of theory of consolidation. Fundamentals of stability of earth retaining walls, slopes, and footings. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for CIVI 431 may not take this course for credit.

CIVI 435 Foundation Design (3.5 credits)

Prerequisite: CIVI 432. Loads, bearing capacity, and settlement. Lateral pressures. Foundation drainage and water-proofing. Spread footings. Strip footings. Pile foundations. Caissons. Retaining walls. Sheet-piling walls. Braced cofferdams. Cellular cofferdams. Anchors. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 437 Advanced Geotechnical Engineering (3 credits)

Prerequisite: CIVI 432. Mechanical properties of rocks and rock formations. Underground openings in rocks. Slope stability of stratified formations. Foundations on rocks. Rock bolting. Introduction of soil dynamics. Wave propagation in one and two dimensions in elastic media. Seismic waves. Foundations subjected to dynamic loading. Theory of liquefaction. Lectures: three hours per week.

CIVI 453 Design of Reinforced Concrete Structures (3.5 credits)

Prerequisite: ENGR 343, 345. Design of long columns, columns subjected to biaxial bending, two-way slabs, flat plates, girders, and shells. Design of frames, shear-walls, and prefabricated structures. Prestressed concrete: losses, short- and long-term deflections; design requirements for shear, flexure, bond, and anchorage. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 454 Design of Steel Structures (3.5 credits)

Prerequisite: ENGR 343, 344. Trends and developments in structural-steel design. Framing systems. Floor systems; composite construction; plate girders. Design of braced frames, moment-resisting frames. Connections. P-Delta effects. Introduction to steel-bridge design. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 464 Environmental Impact Assessment (3 credits)

Prerequisite: CIVI 361. Engineering activities and the environment; environmental ethics. Prediction and estimation of impact on air, water, soil quality, and biological, socio-economic, cultural environments. Water and air pollution laws, solid and hazardous waste laws. Environmental inventories, assessment preparation, and review. Federal and provincial laws and regulations on environmental assessment. Strategies for environmental compliance, resolution of environmental conflicts. Case studies. Lectures: three hours per week.

CIVI 465 Water Pollution and Control (3.5 credits)

Prerequisite: CIVI 361. Physical, chemical, and biological characteristics of water, water quality standards, reaction kinetics and material balances, eutrophication. Containment of reactive contaminants. Natural purification processes in water systems, adsorption, absorption; diffusion and dispersion, oxidation. Large-scale transport of contaminants, single and multiple source models; modelling of transport processes, computer simulation. Introduction to ground-water pollution, sea-water intrusion. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

CIVI 466 Engineering Aspects of Chemical and Biological Processes (3 credits)

Prerequisite: CIVI 361. Introduction to water purification, chemical treatment, coagulation, disinfection, special purification methods. Primary and secondary waste-water treatment, solution and surface chemistry, microbiological consideration; reaction kinetics, diffusion processes, membrane processes, re-aeration. Biological treatment, activated sludge process, treatment and disposal; biological reactors; aerated lagoons; trickling filter; biological nutrient removal. Tertiary waste-water treatment. Lectures: three hours per week.

CIVI 467 Air Pollution and Emission Control (3 credits)

Prerequisite: CIVI 361. Types of air pollutants. Sources of air pollutants, effects of air pollutants on health, vegetation, materials, and the atmosphere; emission standards. Meteorological considerations, dispersion of pollutants in the atmosphere, distribution and cleansing of particle matter, atmospheric photochemical reactions. Particulate pollutant control, source correction, cooling treatment; control of gaseous pollutant, point sources, odour control; measurement techniques; computer applications. Lectures: three hours per week.

CIVI 468 Waste Management (3 credits)

Prerequisite: CIVI 361. Solid waste; source and generation, sampling and analysis, collection, transport, and storage. Waste recycling, physical and chemical reduction; drying; energy recovery; disposal of solid waste. Sanitary and secure landfill planning, site selection, design and operation; chemical and biological reactions. Hazardous waste, chemical and physical characteristics, handling, processing, transportation, and disposal. Resource recovery alternatives, material exchanges, hazardous waste management facilities, incinerators, landfills. Lectures: three hours per week.

CIVI 469 Geo-Environmental Engineering (3.5 credits)

Prerequisite: CIVI 361. Structure and surface chemistry of soil, ion exchange, hydrolysis equilibrium, adsorption. Biochemical degra-

dation, toxic contaminants. Mechanical and thermodynamic equilibrium in soil. Geotechnical considerations in environmental design; soil decontamination. Barrier technologies and soil interaction. Landfill covers and leachate collection systems; subsurface investigation, soil-gas survey. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

CIVI 471 Highway and Pavement Design
(3.5 credits)

Prerequisite: CIVI 271, 372. Design criteria, including capacity and level of service; route alignment and right-of-way considerations; geometric design; earthworks and construction practices. Pavement materials and tests; design of flexible and rigid pavements; pavement management. Computer applications. Geometric and pavement design projects. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 474 Transportation Planning and Design (3 credits)

Prerequisite: CIVI 372. Transportation planning process; data collection and demand analysis; trip generation, trip distribution, modal split and route assignment; forecasting travel patterns. Design of transportation facilities: street sections, intersections, and parking areas. Computer applications and design projects. Lectures: three hours per week. Tutorial: two hours per week, alternate weeks.

CIVI 483 Hydrology (3.5 credits)

Prerequisite: CIVI 381. Weather elements; precipitation, stage-discharge relations; evapo-transpiration; ground-water flow; stream-flow hydrography, unit hydrography, synthetic hydrographs; laminar flow; hydrologic routing; instantaneous hydrograph; hydraulic routing, method of characteristics, kinematic routing; statistical analysis, confidence intervals, stochastic generator, autoregressive model; applications of hydrology. Lectures: two hours per week. Laboratory: three hours per week.

CIVI 484 Hydraulic Engineering
(3.5 credits)

Prerequisite: CIVI 381. Development of surface water resource; basic measurements in hydraulic engineering; storage reservoirs; practical problems; run off characteristics of natural streams; control structures; economic analysis; energy dissipators; sediment transportation; elements of river engineering; navigation; control of floods; computer modelling application. Lectures: two hours per week. Laboratory: three hours per week.

NOTE: Students who have received credit for CIVI 489 may not take this course for credit.

COMPUTER ENGINEERING

COEN 231 Introduction to Discrete Mathematics (3 credits)

Prerequisite: MATH 204 (cégep Mathematics 105). Fundamental principles of counting: rules

of sum and product; permutations, arrangements and combinations, the binomial theorem; combinations with repetition; distributions. Fundamentals of logic: basic connectives and truth tables; logical equivalence; the laws of logic; logical implication; rules of inference; the use of quantifiers; proofs of theorems. Sets: the laws of set theory. Boolean algebra. Relation of Boolean algebra to logical and set theoretic operations. Modulo arithmetic: representations of numbers in binary, octal and hexadecimal formats; binary arithmetic. Induction and recursion: induction on natural numbers; recursive definitions. Functions and relations: cartesian products and relations; functions; function composition and inverse functions; computational complexity. Elements of graph theory: basic definitions of graph theory; paths, reachability and connectedness; computing paths from their matrix representation; traversing graphs represented as adjacency lists; trees and spanning trees. Lectures: three hours per week. Tutorial: one hour per week.

COEN 243 Programming Methodology I
(3 credits)

Prerequisite: COEN 231 previously or concurrently. Computer Systems: computer organization, evolution of operating systems, programming languages and paradigms. Software Development Process: algorithms, pseudocode and control structures, primitive data types, operators, statements, flowcharts and structured programming. Module- and Procedure-oriented Programming: procedures (or methods), packages, scope rules, recursion vs. iteration, arrays, multiple-subscribed arrays, references, parameters, sorting and searching arrays. Object-Based Programming: abstract data type with class, class scope, package and object creation, constructors, selectors, modifiers, finalizers, self reference, class members, data abstraction and information hiding. Introduction to object-oriented programming concepts: superclasses, subclasses, inheritance relationship, composition vs. inheritance, polymorphism, dynamic binding, abstract and concrete classes. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for COMP 248 may not take this course for credit.

COEN 244 Programming Methodology II
(3 credits)

Prerequisite: COEN 243. Review of object-oriented programming and further concepts. Strings and Characters. Fundamentals of file and stream processing. Event-based programming: Basic GUI; event-listener; mouse, keyboard, button and action events; layout managers. Exception handling: error-handling techniques, try/catch blocks. Pointers vs. References. Addressing and indirection. Arrays and pointers. Character string processing. Dynamic data types: Revisiting new/delete. Implicit and explicit instantiations. Inheritance. Polymorphism. Templates: function templates, class templates, standard template

library; containers and iterators. Abstract base classes. Virtual functions. Namespaces. Case study of a medium scale OO project: simplified analysis and design. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for COMP 249 may not take this course for credit.

COEN 311 Computer Organization and Software (3 credits)

Prerequisite: COEN 243, 312 previously or concurrently. Introduction and terminology. Overview of the functional units and the operation of a computer. Machine programming fundamentals: instruction structure, addressing modes, the assembly process, examples of architectures. Case study of a microprocessor architecture: programming model, assembler and addressing modes, instruction set and formats; programming examples. Stacks, subroutines, macros, exceptions, interrupts. Program and interrupt driven I/O. Memory management. Introduction to system software: system kernel, system services, assemblers, compilers, linkers and loaders, user-level view of operating systems. Lectures: three hours per week.

COEN 312 Digital Systems Design I (3.75 credits)

Prerequisite: COEN 231. Logic gates and their use in the realization of Boolean algebra statements; logic minimization, multiple output circuits. Designing with MSI and LSI chips, decoders, multiplexers, adders, multipliers, programmable logic devices. Introduction to sequential circuits; flip-flops. Completely specified sequential machines. Machine equivalence and minimization. Implementation of clock mode sequential circuits. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

COEN 320 Introduction to Real-Time Systems (3 credits)

Prerequisite: COMP 346. Fundamentals of real-time systems (RTS) and principles of current real-time operating systems (RTOS). Focus on timeliness. Characteristics of RTS: time-driven vs. event-driven vs. priority-driven; hard vs. firm vs. soft real-time; critical need to meet deadlines, fault-tolerance, and safety; impacts on requirements and resources. Properties of RTOS and their application domains: control systems, embedded systems, DSP, multimedia, etc. Basic issues in resource management, allocation, and scheduling to satisfy the timing constraints. Implementation strategies: cyclic executives, non-pre-emptive and pre-emptive real-time operating systems (RTOS). Introductory real-time schedulability analysis and basic real-time uniprocessor scheduling algorithms: rate-monotonic, earliest deadline first, and alternative versions. Usage of RTOS services: task management, intertask communication and synchronization, memory management, time management, interrupt support, configuration and initialization. A survey of the services offered in different types of

RTOS and the current state of industrial practice. Lectures: three hours per week.

COEN 345 Software Testing and Validation (4 credits)

Prerequisite: SOEN 342. Overview of the three phases and deliverables of a project. Validation vs. verification, reviews, walkthrough. Testing: acceptance testing, integration testing, module testing, etc. Writing stubs, etc. Performance testing. Role of formal methods. Code inspection. Defect tracking. Causality analysis. Software Metrics and quality management. Project will include the preparation of a requirement document, an implementation (code), test case generation and product testing. Lectures: three hours per week. Laboratory: two hours per week.

COEN 412 Digital Electronics (3.75 credits)

Prerequisite: ELEC 311. Modelling of semiconductor devices for analysis and simulations. MOS, CMOS, TTL, Schottky TTL, ECL, and GaAs circuits. Switching speeds, power dissipation, noise immunity, fan-in and fan-out. Flip-flops and multi-vibrators. Interface and BiCMOS circuits. D/A and A/D converters. Static and dynamic random-access memories. Read-only memories and programmable logic devices and arrays. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

COEN 414 Digital Systems Design II (3.75 credits)

Prerequisite: COEN 312. Two-level and multi-level logic optimization techniques. Hardware description languages (VHDL) for synthesis and simulation. Asynchronous design. Algorithmic state machines. Clocking and clock skew. Metastability. Self-timed concepts. Finite state machine (FSM) optimization. State reduction. FSM partitioning. Programmable logic devices and field programmable gate arrays. Data path and control design for processors. Testing issues. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

COEN 416 Computer Architecture and Design (3 credits)

Prerequisite: COEN 311, 312. Review of basic computer architecture designs. Fundamentals of computer design and performance. Cost issues. Instruction set design principles. Memory hierarchies: registers, caches, and virtual memories. Basic processor implementation issues. High performance computing issues such as pipelining, superscalar, and vector processing. Input/output subsystem designs. Lectures: three hours per week.

COEN 417 Microprocessor Systems (4.5 credits)

Prerequisite: COEN 311, 312. Introduction to microprocessor interfacing. Bus functions, bus interconnections, synchronous and asynchronous bus. Signal flow and data transfer, decoding for I/O and memory, memory organization and struc-

tures. Interfacing examples; parallel interfacing, serial interfacing, the interrupt system; bus arbitration and DMA. Analog-to-digital and digital-to-analog structures and interfacing. Floppy disc and CRT controllers; bus standards; local area networks. Benchmarking and comparative study of recent microprocessors. Lectures: three hours per week. Laboratory: three hours per week.

COEN 418 Real-Time System Design
(4.5 credits)

Prerequisite: COEN 312 or COMP 327; COMP 346. Introduction to real-time systems. Requirements, programming, design, applications, reliability, and fault tolerance. Real-time and multi-tasking operating systems. Multi-tasking and schedule, task control, intertask communication and synchronization, interrupt and exception handling, examples. Real-time multi-processor system design: concurrent programming and examples of programming languages, concurrent processes and reliability, resource sharing and control, inter-processor communication and synchronization, bus configuration and link configuration, special processors. Case studies in real-time system design. Lectures: three hours per week. Laboratory: three hours per week.

COEN 420 Real-Time Systems Design
(3.00 credits)

Prerequisite: COEN 320; SOEN 343. Focus on modelling languages, code generation from design models, scheduling algorithms and timing analysis of the design and implementation. Introduction to real-time development methods: modelling languages (RT_UML, ROOM, SDL, OMT, MSC, etc.), their semantics, diagrams, and notations. Architectural aspects: look at techniques for allocating and scheduling tasks on processors to ensure that deadlines are met. Requirements Analysis: external events specification, use cases, scenarios, sequence diagrams denoting timing constraints, concurrent collaboration diagrams representing interaction of messages, state diagrams representing states and transitions. Multiprocessor scheduling algorithms: heuristics, utilization balancing, next-fit, bin-packing, bidding, and buddy. Distributed end-to-end schedulability analysis. Lectures: three hours per week.

COEN 421 Embedded Systems and Software Design (4.5 credits)

Prerequisite: COEN 320. Focus on aspects of complete embedded systems issues (low power, hardware/software codesign, fault-tolerance and reliability, memory size, etc.), as well as real-time issues (real-time communication and protocols; clock synchronization and algorithms for fault-tolerant synchronization; and user design interface). Simulation techniques for developing, testing, and verifying the real-time performance of the target system. A design project provides the opportunity to design, implement, and test a real-time embedded system. Lectures: three hours per week. Laboratory: three hours per week.

COEN 431 Software Engineering
(4 credits)

Prerequisite: COMP 352. Introduction to the software life cycle. Software life cycle models. Methods and tools for requirements analysis, specification; design, implementation, verification and maintenance of large, complex software system. Software reliability. Project documentation, organization and control, communication, and time and cost estimates. Lectures: three hours per week. Laboratory: two hours per week. *NOTE: Students who have received credit for COMP 354 may not take this course for credit.*

COEN 445 Communication Protocols and Network Security (4 credits)

Prerequisite: COMP 346; ELEC 361. The study of remote access to and communications between computers. Basics of communications protocols. Layered architectures and standards. Network layers and end-to-end layers. Importance of security. Principles of encryption and authentication. Network security protocols: X509, Internet Protocol and Security (IPSEC) Architecture. Lectures: three hours per week. Laboratory: two hours per week.

COEN 490 Computer Engineering Project
(4 credits)

Prerequisite: Final-year standing or permission of the Department; ENGR 411 concurrently. This will be a design project carried in groups of about four students under the direct supervision of a faculty member, and will normally be carried out over two terms. General project specifications and membership of design groups will be determined by the Department in consultation with faculty members and, where feasible, with industry. Each group will choose a group leader who will be responsible for overall coordination of the project. The project will consist of three phases with deadlines for completion determined by the Department. The first phase consists of the project specification and plan of work where each member of the group will submit in writing and orally, one portion of the total specification. This will be graded for content and quality of presentation. The second phase consists of project execution. The third phase consists of the preparation and presentation of a report. Again, each member of the group is expected to prepare a portion of the final report and to present it both in writing and orally. Tutorials will consist of meetings with the supervising faculty member, as well as some instruction and exercises on verbal and oral presentations. Tutorial: one hour per week, two terms. Equivalent laboratory time: four hours per week, two terms.

NOTE: Students are responsible for acquiring a complete set of instructions and the document Form and Style before beginning the project.

COEN 498 Topics in Computer Engineering (3 credits)

Prerequisite: Permission of the Department. The course, when offered, will include topics which

complement elective courses in computer engineering and computer science. Lectures: three hours per week.

ELECTRICAL ENGINEERING

ELEC 251 *Fundamentals of Applied Electromagnetics* (3 credits)

Prerequisite: ENGR 273; EMAT 232 previously or concurrently. Electric charge, Coulomb's law, electrostatic forces, electric field, Gauss' law, electric potential, stored energy. Dielectrics, properties of materials in electric fields. Electric current, conduction in a vacuum and in material media, displacement current, magnetic field of a current, force on a current-carrying wire, magnetic induction, electromotive force, energy stored in a magnetic field. Magnetism in material media, magnetic circuits. Time-varying fields. Capacitance, resistance, inductance, elements of electric circuits. Lectures: three hours per week. Tutorial: one hour per week.

ELEC 311 *Electronics I* (4.5 credits)

Prerequisite: ENGR 273. Diodes: the ideal diode; terminal characteristics of junction diodes; analysis of diode circuits; the small signal model and its application; operation in the reverse-breakdown region — Zener diodes; rectifier circuits; limiting and clamping circuits. Bipolar junction transistors: structure and physical operation; DC analysis: biasing considerations: small signal analysis and parameters; hybrid π model, T model; common base, common emitter, common collector configurations. Field-effect transistors: structure and physical operation; DC analysis; biasing considerations; small signal analysis and parameters; hybrid π model, T model; common gate, common source, common collector configurations. Differential and multi-stage amplifiers: differential pair; differential gain; common-mode gain and common mode rejection ratio (CMRR). Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week.

ELEC 312 *Electronics II* (4.5 credits)

Prerequisite: ELEC 311, 361. High frequency models: s-domain analysis, transfer functions; hybrid π model at high frequency; common base, common emitter, common collector configurations; common gate, common source, common collector configurations; differential BJT pairs at high frequency; MOS differential pair at high frequency. Feedback: general feedback structure; properties of negative feedback; the four basic feedback configurations: series-shunt, series-series, shunt-series, shunt-shunt; loop gain and stability problems; effect of feedback on amplifier poles; bode plots and frequency compensation. Power amplifiers: classification and output stages: class A, B, C, and AB amplifiers; biasing the class AB amplifier; variations on the class AB configuration; IC power amplifiers and MOS power transistors. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week.

ELEC 321 *Introduction to Semiconductor Materials and Devices* (3.5 credits)

Prerequisite: ELEC 251. Fundamentals underlying optical and electronic devices. The structure and growth of crystals. The energy band model for elemental and compound semiconductors. Electronic and optical properties of semiconductors. Electroluminescence and photoluminescence. The semiconductor in equilibrium. Carrier transport and non-equilibrium phenomena. Introductions to junctions and devices. The laboratory demonstrates the basic electrical and optical properties of semiconductor materials. Lectures: three hours per week. Laboratory: three hours per week, every three weeks.

ELEC 331 *Fundamentals of Electrical Power Engineering* (3.75 credits)

Prerequisite: ENGR 273; ELEC 251. Review of fundamentals of AC circuit analysis. Overview of power systems. Three-phase circuits: balanced three-phase circuits with star and delta connected loads, power measurements. Magnetic circuits. Transformers. Power conversion techniques: single phase AC/DC rectifiers, DC/DC choppers and DC/AC converters. DC machines: Operating principle, separately excited DC motor, torque speed characteristics and control methods using rectifiers and choppers. Induction machines: Theory of three-phase induction machines, equivalent circuit parameters, efficiency, torque speed characteristics and control methods using inverters. Overview of power distribution systems. Safety codes. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 334 *Electric Machinery* (3.75 credits)

Prerequisite: ENGR 370. Three-phase circuits. Magnetic fields, circuits, and forces; transformers; basic features of rotating machines; models, characteristics and applications of dc machines, polyphase synchronous and induction machines. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.
NOTE: Computer Engineering and Electrical Engineering students may not take this course for credit.

ELEC 351 *Electromagnetic Waves and Guiding Structures* (3 credits)

Prerequisite: ELEC 251; EMAT 332. Maxwell's equations. Differential forms of the laws of electromagnetism. Boundary conditions. Power and energy. Uniform plane waves. Transmission line theory. Rectangular waveguides. Antennas. Lectures: three hours per week. Tutorial: one hour per week.

ELEC 353 *Basic Electromagnetics and Transmission Line Theory* (3 credits)

Prerequisite: EMAT 252; ENGR 273. Laws of electromagnetism, including differential forms. Boundary conditions. Maxwell's equations. Plane Waves. Transmission line theory.

Antennas. Lectures: three hours per week.
Tutorial: one hour per week.

ELEC 361 Signals and Systems (3 credits)

Prerequisite: EMAT 232, 252; ENGR 273.
Laplace transforms. System functions. Impulse response. Convolution. The exponential and trigonometric forms of the Fourier series. Frequency domain plots of Fourier series coefficients. Mean square convergence. Gibbs' phenomenon. The Cauchy limit form of the Fourier transform. Transforms of periodic functions. Relation between the Fourier and Laplace transforms. Frequency domain plots. Difference equations. The Z transform. The Z plane. Relation between the Z transform and the Fourier and Laplace transforms. Unit pulse response. Numerical convolution. Discrete Fourier transform. Lectures: three hours per week.
NOTE: Students who have received credit for EMAT 312 may not take this course for credit.

ELEC 411 Pulse and Waveform Generation (3.75 credits)

Prerequisite: ELEC 312, 361. Modelling and techniques of analysis. Multivibrator circuits: analysis, design, and applications. Oscillator circuits. Linear sawtooth generators. Pulse transformers and blocking oscillators. Negative-resistance devices and some applications. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 421 Solid State Devices (3.75 credits)

Prerequisite: ELEC 321. Junction theory (PN junctions, Schottky and ohmic contacts, heterojunctions). Diodes and bipolar transistors. Light-emitting diodes, photodetectors, solar cells, and fibre optics. Lasers: operating principles and applications in optoelectronic devices. Planar silicon junctions and transistors will be designed, fabricated and evaluated in the laboratory, including resistivity measurements, semiconductor cleaning, oxidation, diffusion, photolithography, etching, metallization, and comparison of design with experimental results. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 422 Design of Integrated Circuit Components (3.75 credits)

Prerequisite: ELEC 421. Structures, characteristics and design of MOS capacitors and MOSFETs. Structures, characteristics and design of laser diodes. Optoelectronic devices and integrated circuits. Planar MOS devices, including capacitors and MOSFETs will be designed, fabricated, and evaluated in the laboratory. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 431 Electrical Power Systems (3.75 credits)

Prerequisite: ELEC 331. Inductance, capacitance, resistance of polyphase transmission lines; current and voltage relations of transmission lines; load flow studies; symmetrical and unsymmetrical

faults; power system stability. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 432 Control of Electrical Power Conversion Systems (3.75 credits)

Prerequisite: ENGR 372; ELEC 331. Basic considerations and control requirements. Control system principles and structures. Controller characteristics and operation. Static power conversion systems. Electromechanical systems and electrical machine modelling. Control system design. Applications to electric motor drives and typical power conversion systems. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 433 Power Electronics (3.75 credits)

Prerequisite: ELEC 311, 331. Introduction to power electronics: definition, applications and classification of converters. Review of analytical techniques. Overview of power semiconductor switches. AC/DC rectifiers. Switch mode DC/DC converters. Resonant mode DC/DC converters. DC/AC inverters. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 441 Analog Filter Design (3.75 credits)

Prerequisite: ENGR 370. Two-port networks and parameters. Magnitude and phase approximation. Butterworth and Chebyshev filters. Realization of high-order transfer functions. GIC and FDNR second order active RC filters. Op-amp based designs. Monolithic continuous time filter. OTA based designs. Monolithic sampled data filters. Switched capacitor filters. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 442 Introduction to Digital Signal Processing (3.75 credits)

Prerequisite: ELEC 361. Review of discrete-time system properties and associated mathematical tools. Properties of linear-time invariant digital filters. Common digital filter structures. Common approaches to the design of digital filter transfer functions meeting time or frequency domain specifications. Computer-aided design and simulation of digital filters. A/D and D/A converters. Effect of finite word lengths. Description of a typical DSP chip. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 453 Microwave Engineering (3.75 credits)

Prerequisite: ENGR 370; ELEC 351. Properties of waveguides, striplines, and microstrips. Scattering parameters. Butterworth and Chebyshev impedance transformers. Microwave couplers, cavities, and Fabry-Perot resonators. Periodic structures. Microwave filter design. Faraday rotation and non-reciprocal devices. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 454 *Optical Electronics* (3.75 credits)

Prerequisite: ENGR 370; ELEC 351. The Gaussian beam. Optical properties of dielectrics. Slab and fibre waveguides. Multilayer optical impedance transformation. Optical couplers, gratings, and distributed feedback structures. Principles of electro-optic devices. Interferometric devices. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 455 *Acoustics* (3 credits)

Prerequisite: ELEC 351. Sound generation and propagation in elastic media; conversion between acoustical, electrical, and mechanical energy. Lumped-parameter approximations, sound in rooms, underwater acoustics, microphones; loudspeakers and audio communications problems; noise and vibration control problems. Lectures: three hours per week.

ELEC 456 *Antennas* (3 credits)

Prerequisite: ELEC 351. Antenna fundamentals and definitions. Radiation integrals. Dipoles and loops. Arrays. Antenna self and mutual impedance. Matching techniques. Travelling wave antennas. Broadband antennas. Equivalence principle. Aperture antennas. Antenna measurement techniques. Lectures: three hours per week.

ELEC 461 *Fundamentals of Telecommunications Systems* (3.75 credits)

Prerequisite: ELEC 361; ENGR 371. Introduction to basic telecommunications concepts and systems. Analog communications: AM and FM, system level consideration of noise-bandwidth tradeoffs. Digital communications: sampling and quantization, digital modulation techniques, the matched filter. Redundancy encoding. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 462 *Digital Transmission Systems* (3.75 credits)

Prerequisite: ELEC 461, 471. Properties of transmission media: wire, coax, optical fibre, radio, satellite. Fundamentals of digital transmission; properties of noise, optimum receiver concepts. Performance of modulation techniques: PAM, PCM, PSK, FSK, QAM, Spread spectrum. Error control coding; ARQ and FEC. Basic concepts of information theory. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 463 *Telecommunication Networks* (3 credits)

Prerequisite: ELEC 461, 471. Introduction to layered network architecture; data link control and communication channels. Delay models in data networks; simple queueing systems; multi-access communications; ALOHA, CSMA, reservation schemes, conflict-free access schemes. Satellite, packet radio networks, token rings and polling; routine and flow control; ISDN. Lectures: three hours per week.

ELEC 464 *Communications Systems Engineering* (3.75 credits)

Prerequisite: ELEC 462. Communications system topologies: Point-to-Point, Point-to-Multipoint, Access and Backbone. Multiple-Access techniques and communications resource sharing: FDMA, TDMA, CDMA, system operation/design and related issues, performance comparison, switching techniques, switched network and signalling. Wireline communications systems: issues, system design, example systems: DSL, HFC, SONET, ATM. Wireless communications systems: issues, link engineering, system design, example systems: Satcom, Terrestrial Microwave: PCS, Cellular, LMDS/LMCS. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 465 *Internetworking and Network Management* (3.75 credits)

Prerequisite: ELEC 463. Broadband communications: concept, issues, signalling techniques, examples. Multimedia communications: traffic characteristics, classes, issues (e.g. QOS) and architectures. Traffic control: issues and techniques (illustrated with TCP/IP). Internetworking: issues, architectures (e.g. router, bridge, gateway), spanning trees, protocols and standards: ISO, IP and IPv6. Network management: issues, architecture, management information base. Functional areas: fault management, configuration management, security management, performance management, accounting management, standards (e.g. SNMP, CMIP, TMN). Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

ELEC 471 *Random Processes* (3 credits)

Prerequisite: ENGR 371; ELEC 361. Definition and classification of random processes; ergodicity and stationarity; auto and cross correlations; power spectral density Gaussian processes; linear transformations, estimation, and prediction; nonlinear transformations (full- and half-wave rectification); diffusion processes, Markov chains, Markov processes, Poisson processes, application to queueing. Lectures: three hours per week.

ELEC 472 *Performance Evaluation of Telecommunication Systems* (3 credits)

Prerequisite: ELEC 463. Performance measures: delay, throughput, loss probability, error probability. Performance evaluation techniques: analysis, simulation, queueing models: birth-death models, imbedded Markov chains, multidimensional Markov chains, Markov modulated processes. Simulation: event and time-driven simulations, variance reduction techniques, software (e.g. OPNET). Lectures: three hours per week.

ELEC 473 *Overview of Communications Systems* (3 credits)

Prerequisite: ELEC 461. Broad perspective of the overall operation of a telecommunications

company (systemic approach). Introduction to most of the engineering-related aspects of managing a telecommunications company, be it a conventional or wireless telephone company, a competitive toll or a local service company. Overview of the elements that must be considered by engineers working in these fields, primarily in terms of the Canadian industry, including Canadian telecommunications regulation, but also in terms of the market globalization of telecommunications. Impact of emerging telecommunications technologies. Project work will include the simulation of end-to-end networks. Lectures: three hours per week.

ELEC 490 *Electrical Engineering Project*
(4 credits)

Prerequisite: Final-year standing or permission of the Department; ENGR 411 concurrently. This will be a design project carried in groups of about four students under the direct supervision of a faculty member, and will normally be carried out over two terms. General project specifications and membership of design groups will be determined by the Department in consultation with faculty members and, where feasible, with industry. Each group will choose a group leader who will be responsible for overall coordination of the project. The project will consist of three phases with deadlines for completion determined by the Department. The first phase consists of the project specification and plan of work where each member of the group will submit in writing and orally, one portion of the total specification. This will be graded for content and quality of presentation. The second phase consists of project execution. The third phase consists of the preparation and presentation of a report. Again, each member of the group is expected to prepare a portion of the final report and to present it both in writing and orally. Tutorials will consist of meetings with the supervising faculty member, as well as some instruction and exercises on verbal and oral presentations. Tutorial: one hour per week, two terms. Equivalent laboratory time: four hours per week, two terms.

NOTE: Students are responsible for acquiring a complete set of instructions and the document Form and Style before beginning the project.

ELEC 498 *Topics in Electrical Engineering* (3 credits)

Prerequisite: Permission of the Department. This course may be offered in a given year upon the authorization of the Electrical and Computer Engineering Department. The course content may vary from offering to offering and will be chosen to complement elective courses available in a given year.

INDUSTRIAL ENGINEERING

INDU 211 *Introduction to Production and Manufacturing Systems*
(3 credits)

History of industrial engineering. Role of industrial engineers. Types of manufacturing and production

systems. Material flow systems. Job design and work measurement. Introduction to solution methodologies for problems which relate to the design and operation of integrated production systems of humans, machines, information, and materials. Lectures: three hours per week.

INDU 311 *Simulation of Industrial Systems* (3.5 credits)

Prerequisite: ENGR 371. Modelling techniques in simulation; application of discrete simulation techniques to model industrial systems; random number generation and testing; design of simulation experiments using different simulation languages; output data analysis. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks. Tutorial: one hour per week.

INDU 313 *Industrial Economics*
(3 credits)

Prerequisite: ACCO 220. Economic analysis for engineering decision making; the finance function in an industrial enterprise, time value of money; basic interest formulas; annual cost comparison; present value analysis; rate of return; depreciation and taxes; multiple alternatives; mathematical models for equipment replacement; break-even, sensitivity, and risk analysis; introduction to decision analysis; concepts of cost engineering. Lectures: three hours per week.

INDU 320 *Production Engineering*
(3 credits)

Prerequisite: INDU 323. The systems approach to production. Interrelationships among the component blocks of the system: forecasting, aggregate planning, production, material and capacity planning, operations scheduling. An overview of integrated production planning and control including MRP II, Just in Time manufacturing (JIT). Lectures: three hours per week.

INDU 323 *Industrial Operations Research*
(3 credits)

Prerequisite: EMAT 213, 233. An introduction to deterministic mathematical models with emphasis on linear programming. Applications to production, logistics, and service systems. Computer solution of optimization problems. Lectures: three hours per week.

INDU 330 *Engineering Management*
(3 credits)

Organizational structures, their growth and change. Motivation, leadership, and group behaviour. Design of alternatives for improving organizational performance and effectiveness. Planning, organization and management of engineering projects. Management for total quality. Lectures: three hours per week.

INDU 372 *Quality Control and Reliability*
(3 credits)

Prerequisite: ENGR 371. Importance of quality; total quality management; statistical concepts relevant to process control; control charts for variables and attributes; sampling plans. Intro-

duction to reliability models and acceptance testing; issues of standardization. Lectures: three hours per week.

INDU 410 *Safety Engineering* (3.5 credits)
Prerequisite: MECH 221; ENGR 361. Engineering design for the control of workplace hazards. Occupational injuries and diseases. Codes and standards. Workplace Hazardous Materials Information Systems (WHMIS). Hazard evaluation and control. Design criteria. Risk assessment. Safety in the manufacturing environment. Applications in ventilation, air cleaning, noise and vibration. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

INDU 411 *Computer Integrated Manufacturing* (3.5 credits)
Prerequisite: MECH 311. Concepts and benefits of computer integrated manufacturing (CIM). Design for manufacturing. Computer-aided design, process planning, manufacturing (computer numerical control parts programming), and inspection. Robots in CIM. Production planning and scheduling in CIM. System integration. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

INDU 412 *Human Factors Engineering* (3.75 credits)
Prerequisite: ENGR 371; INDU 320 previously or concurrently. Elements of anatomy, physiology, and psychology; engineering anthropometry; human capacities and limitations; manual material handling; design of workplaces; human-machines system design; design of controls and displays; shift work. Applications to a manufacturing environment. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

INDU 421 *Facilities Design and Material Handling Systems* (3.5 credits)
Prerequisite: INDU 320. An introduction to planning and design of production and manufacturing. Facility layout and location. Material handling systems and equipment specifications. Computer-aided facilities planning. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

INDU 423 *Inventory Control* (3.5 credits)
Prerequisite: INDU 320. Inventory analysis and control systems; the role of forecasting in controlling inventories; the role of inventories in physical distribution; supply chain management; work in process inventories; inventory in just-in-time manufacturing systems. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

INDU 430 *Advanced Operations Research* (3 credits)
Prerequisite: INDU 323. Integer programming (IP), including modelling and enumerative algorithms for solving IP problems; post-optimality analysis. Network flows, dynamic programming and non-

linear programming. Applications in the design and operation of industrial systems. Lectures: three hours per week.

INDU 463 *Industrial Automation* (3 credits)
Prerequisite: ENGR 372 previously or concurrently. Introduction to mechanization of industrial processes such as machining, material handling, assembling, and quality control; selection of actuators and sensors for mechanization; design of sequential control circuits using classical methods, ladder diagram, travel-step diagram and cascade method; specifying control sequences using GRAFCET and FUP; special purpose circuits such as emergency circuits, timers, and programmable logic controllers (PLCs); case studies dealing with typical industrial manufacturing processes and computer simulation. Lectures: three hours per week.

INDU 466 *Decision Models in Service Sector* (3 credits)
Prerequisite: ENGR 371; INDU 320. The course surveys applications of decision models in the service sector. Efficiency and effectiveness issues in the service sector such as police deployment, municipal resource allocation, health care, and criminal justice models are covered. Case studies from Canada and other countries are discussed using operations research, operations management, and statistical techniques. Lectures: three hours per week. *NOTE: This is the same course as DESC 466 with the exception of prerequisites.*

INDU 471 *Stochastic Models in Industrial Engineering* (3 credits)
Prerequisite: ENGR 371. Overview of probability theory; probability distributions; exponential model and Poisson process; discrete-time and continuous-time Markov chains; classification of states; birth and death processes; queueing theory. Application to industrial engineering problems. Lectures: three hours per week. *NOTE: Students who have received credit for INDU 371 may not take this course for credit.*

INDU 475 *Advanced Concepts in Quality Improvement* (3 credits)
Prerequisite: INDU 372. Statistical experimental design issues such as randomized blocks, factorial designs at two levels, applications on factorial designs, building models, Taguchi methods. Lectures: three hours per week.

INDU 490 *Capstone Industrial Engineering Design Project* (4 credits)
Prerequisite: 75 credits in the program; ENGR 410 concurrently. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report by each student at the end of the Fall Term, a final report by the group and individual oral presentation at the end of the Winter Term. Lectures: one hour per week, one term. Equivalent laboratory

time: three hours per week, two terms.
NOTE: Students will work in groups under direct supervision of a faculty member.
NOTE: Students who have received credit for INDU 480 may not take this course for credit.

INDU 498 *Topics in Industrial Engineering* (3 credits)

Prerequisite: Permission of the Department chair. This course may be offered in a given year upon the authorization of the Mechanical Engineering Department. The course content may vary from offering to offering and will be chosen to complement the elective courses available in the Industrial Engineering program. Lectures: three hours per week.

MECHANICAL ENGINEERING

MECH 211 *Mechanical Engineering Drawing* (3 credits)

Drawing as a communicating means. The third and the first angle views. Orthographic projection of points, lines, planes and solids. Principal and auxiliary views. Views in a given direction — axonometric views. Intersection of planes and solids, development of surfaces. Sectional views and drafting practices. Dimensioning, size tolerancing and fits. Computer-aided drawing and solid modelling. Working drawings — detail and assembly drawing. Design practice. Lectures: two hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

MECH 215 *Programming for Mechanical and Industrial Engineers I* (3 credits)

Prerequisite: MATH 204 (cégep mathematics 105); COMP 201. Writing simple programs using assignment and sequence. Variables. Simple types. Operators and expressions. Conditional and repetitive statements. Input and output. Simple functions. Program structure and organization. Definition and scope. Data abstraction and encapsulation. Introduction to classes and objects. Constructors. Examples and assignments will be relevant to engineering. Lectures: three hours per week. Tutorial: one hour per week.

MECH 216 *Programming for Mechanical and Industrial Engineers II* (3 credits)

Prerequisite: MECH 215. Class definitions. Designing classes and member functions. Class libraries and their uses. Input and output. Program development. Introduction to software engineering. Specification and implementation. Inheritance. Examples and assignments will be relevant to engineering. Lectures: three hours per week. Tutorial: one hour per week.

MECH 221 *Materials Science* (2 credits)
 Prerequisite: CHEM 205 (cégep Chemistry 101). Relationships between properties and internal structure, atomic bonding; molecular, crystalline and amorphous structures; crystalline imperfec-

tions and mechanisms of structural change; microstructures; structures and mechanical properties of polymers. Lectures: two hours per week. Tutorial: two hours per week.
NOTE: Students who have received credit for ENGR C221 may not take this course for credit.

MECH 311 *Manufacturing Processes* (3.5 credits)

Prerequisite: MECH 313. Fundamentals of manufacturing processes and their limitations, metrology, machine shop practice, safety and health considerations, forming, machining and casting processes, welding and joining, plastic production, and non-conventional machining techniques. Laboratory includes use of basic machines, preparation of shop drawings with emphasis on production and field trips to local industries. Lectures: three hours per week. Tutorial: four hours per week, alternate weeks, including industrial visits. Laboratory: two hours per week, alternate weeks.

MECH 313 *Machine Drawing and Design* (3 credits)

Prerequisite: MECH 211. The use of drawings and other graphical methods in the process of engineering design. Industrial standards and specifications, standard components and their use in product design. Detailed study of standard machine elements and assemblies, including various types of mechanical drives, cams, clutches, couplings, brakes, seals, fasteners, springs, and bearings; their representation and function in design and working drawings. Dimensioning and tolerance systems related to manufacturing processes, interchangeability, quality control, patent procedures. Pencil thinking and computer graphics in the design process. Computer-aided machine drawing. A student design project will be an integral part of this course. A four-hour introduction to machine shop techniques forms part of the tutorial. Lectures: three hours per week. Tutorial: two hours per week.

MECH 321 *Properties and Failure of Materials* (3.5 credits)

Prerequisite: MECH 221. The service capabilities of alloys and their relationship to microstructure as produced by thermal and mechanical treatments; tensile and torsion tests; elements of dislocation theory; strengthening mechanisms; composite materials. Modes of failure of materials; fracture, fatigue, wear, creep, corrosion, radiation damage. Failure analysis. Material codes; material selection for design. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 341 *Kinematics and Dynamics of Mechanisms and Manipulators* (2.5 credits)

Prerequisite: EMAT 232; ENGR 243. Geometry of motion and mobility criteria; planar and spatial mechanisms; general relationship governing rela-

tive motion, displacement, velocity, acceleration and Coriolis acceleration. Vector calculus, complex vectors, and graphical methods for velocity and acceleration. Instantaneous centres; line of centres method for velocity determination. Static and dynamic force analysis of planar mechanisms; effect of friction forces; static force-torque relationship for manipulators; virtual work method; dynamics of manipulators. Lectures: two hours per week. Tutorial: two hours per week, alternate weeks. Laboratory: two hours per week, alternate weeks.

MECH 342 Theory of Machines (2.5 credits)
Prerequisite: MECH 341. Cam kinematics; cam layout; basic follower motions; pressure angle; cam curvature constraints. Velocity, acceleration and jerk of cam followers. Kinematics of spur gears; standard teeth-layout of gear and pinion; involutometry; contact ratio; non-standard gears. Helical gears for parallel and crossed shafts; worm gear layout. Straight bevel gears, spiral and hypoid bevel gears. Gear trains; planetary gear trains. Differentials and differential screws. Force analysis of gears. Gyroscopic effect in machines. Static and dynamic balancing of rotating masses reciprocating machinery with single and multiple cylinders. Lectures: two hours per week. Tutorial: two hours per week, alternate weeks. Laboratory: two hours per week, alternate weeks.

MECH 343 Theory of Machines I (3.5 credits)
Prerequisite: EMAT 213, 233; ENGR 243. Introduction to mechanisms; position and displacement; velocity; acceleration; synthesis of linkage; robotics; static force analysis; dynamic force analysis; forward kinematics and inverse kinematics; introduction to gear analysis and gear box design; kinematic analysis of spatial mechanisms. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.
NOTE: Students who have received credit for MECH 341 may not take this course for credit.

MECH 351 Thermodynamics II (3.5 credits)
Prerequisite: ENGR 251. Brief review of ideal gas processes. Semi-perfect gases and the gas tables. Mixtures of gases, gases and vapours, air conditioning processes. Combustion and combustion equilibrium. Applications of thermodynamics to power production and utilization systems: study of basic and advanced cycles for gas compression, internal combustion engines, power from steam, gas turbine cycles, and refrigeration. Real gases. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 352 Heat Transfer I (3.5 credits)
Prerequisite: EMAT 311. Analytical and numerical methods for steady-state and transient heat conduction. Empirical and practical relations for forced- and free-convection heat transfer. Radiation heat exchange between black bodies, and

between non-black bodies. Gas radiation. Solar radiation. Effect of radiation on temperature measurement. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 361 Fluid Mechanics II (3.5 credits)
Prerequisite: ENGR 361. Selected solutions of the Navier-Stokes equations. Introduction to turbulent flow. Fully developed pipe and duct flows, major and minor losses, flow measurement. Euler equations, potential flows, superposition of elementary plane flows. Boundary layers, flow about immersed bodies. Propagation of sound waves, isentropic flow of ideal gases in one dimension, stagnation properties, normal shocks. Introduction to open channel flows. Laboratory experiments: flow visualization, laminar and turbulent pipe flows, lift and drag of airfoils, Stokes' flow, numerical solution of potential flows. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 372 Industrial Electronics (3.5 credits)
Prerequisite: ENGR 370. A survey of electronic components and systems used in industry. Analog devices; the transistor, the operational amplifier and their models. Amplifiers. Digital devices: gates, logic devices. Large scale integrated circuits, microcomputers. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.
NOTE: Students who have received credit for ELEC 318 may not take this course for credit.
NOTE: Electrical Engineering and Computer Engineering students may not take this course for credit.

MECH 373 Instrumentation and Measurements (3.5 credits)
Prerequisite: ENGR 370. Unified treatment of measurement of physical quantities; static and dynamic characteristics of instruments — calibration, linearity, precision, accuracy, and bias and sensitivity drift; sources of errors; error analysis; experiment planning; data analysis techniques; principles of transducers; signal generation, acquisition and processing; principles and designs of systems for measurement of position, velocity, acceleration, pressure, force, stress, temperature, flow rate, proximity detection, etc. The course includes demonstration of various instruments. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 411 Design and Analysis of Mechanical Components (2.5 credits)
Prerequisite: MECH 311. Analytical review of current design practices and specification of standard components encountered in mechanical engineering. Introduction to overall system reliability estimates, safety considerations, interchangeability of mechanical devices and influence of stress-strength in determining the actual configuration of mechanical elements. Standard components covered include various

types of mechanical drives, cams, clutches, couplings, brakes, seals, fasteners, springs, and bearings. Lectures: two hours per week. Tutorial: two hours per week. Laboratory: two hours per week, alternate weeks.

MECH 412 Computer-Aided Mechanical Design (3.5 credits)

Prerequisite: MECH 313. Introduction to computational tools in the design process. Introduction to the fundamental approaches to computer-aided geometric modelling, physical modelling and engineering simulations. Establishing functions and functional specifications with emphasis on geometric tolerancing and dimensioning, manufacturing and assembly evaluation. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 413 Theory of Machines II (3.5 credits)

Prerequisite: MECH 343. Spur gears; helical, worm and bevel gears; gear trains, design and analysis; cam design; balancing of machinery; theory of flywheel; theory of universal joints; theory of friction. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for MECH 342 may not take this course for credit

MECH 421 Mechanical Shaping of Metals and Plastics (3.5 credits)

Prerequisite: MECH 221. Metal forming: extrusion, forging, rolling, drawing, pressing, compacting; shear line theory, sheet forming limits. Metal cutting, machinability, tooling. Plastics shaping: extrusion, moulding, vacuum forming. Consideration of the mechanical parameters critical for process control and computer applications. Interaction of materials characteristics with processing to define product properties: cold working, annealing, hot working, super plasticity, thermomechanical treatment. Energy conservation, safety, product quality, and liability. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 422 Mechanical Behaviour of Polymer Composite Materials (3 credits)

Prerequisite: ENGR 244; MECH 221. General applications of polymer composite materials in aircraft, aerospace, automobile, marine, recreational, and chemical processing industries. Mechanics of a unidirectional lamina. Transformation of stress, strain, modulus, and compliance. Off-axis engineering constants, shear and normal coupling coefficients. In-plane and flexural stiffness and compliance with different laminates, including cross-ply, angle-ply, quasi-isotropic, and general bidirectional laminates. Hygrothermal effects. Strength of laminates and failure criteria. Micromechanics. Lectures: three hours per week.

MECH 423 Casting, Welding, Heat Treating, and Non-Destructive Testing (3.5 credits)

Prerequisite: MECH 221. Comparative analysis

of the various techniques of casting, welding, powder fabrication, finishing, and non-destructive testing. Consideration of the control parameters that are essential to define both automation and robot application. Materials behaviour which determines product micro-structure and properties. Technology and theory of solidification, normalizing, quenching, surface hardening, tempering, aging, and thermomechanical processing for steels, cast irons and Al, Cu, Ni and Ti alloys. Energy conservation, worker safety, quality control, and product liability. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 424 Design and Fabrication of Micromachines and Micromechanisms (3.5 credits)

Prerequisite: MECH 311, 343. Introduction to micromachining processes; mechanical properties of materials used in micromechanical systems; design and fabrication of free standing structures; sacrificial and structural layers; finite element modelling; micromechanical components; solid lubrication of microbearings; special techniques: double-side lithography, anodic bonding, electrochemical drilling, deep etching, LIGA process, laser microfabrication; influence of IC fabrication processes on the mechanical properties; applications in microdevices; simulation and packaging. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 425 Manufacturing of Composites (3.5 credits)

Prerequisite: MECH 311. Fibres and resins. Hand lay up. Autoclave curing. Compression molding. Filament winding. Resin transfer molding. Braiding. Injection molding. Cutting. Joining. Thermoset and thermoplastic composites. Process modelling and computer simulation. Non-destructive evaluation techniques. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 426 Stress and Failure Analysis of Machinery (3 credits)

Prerequisite: ENGR 244. Analysis of stresses, strains and deformations in machine elements; non-symmetric bending of beams; shear centre for thin-walled beams; curved beams; torsion of non-circular shafts and tubes; thick wall cylinders; plates and shells; contact elements; stress concentrations; energy methods; failure modes, analysis and prevention; buckling, fracture, fatigue and creep. Lectures: three hours per week.

MECH 431 Principles of Aeroelasticity (3 credits)

Prerequisite: EMAT 311; ENGR 243. Aerodynamic loading of elastic airfoils. Phenomenon of divergence. Effect of flexible control surface on divergence of main structure. Divergence of one- and two-dimensional wing models. Phenomenon of flutter. Flutter of two- and three-dimensional wings. Flutter prevention and control. Panel flutter

in high speed vehicles, flutter of turbomachine bladings, galloping vortex-induced oscillations, bridge buffeting. Lectures: three hours per week.

MECH 441 *Mechanical Engineering Design* (3 credits)

Prerequisite: ENGR 244; MECH 313, 343. Introduction to overall reliability estimates and influence of stress-strength in determining the actual configuration of mechanical elements. Probabilistic design theory. Concepts in design; probabilistic approach; fatigue and failure of mechanical elements under dynamic loading; shafting; bolted and welded joints; anti-friction and journal bearings; design of gears. Lectures: three hours per week. Tutorial: two hours per week.

MECH 443 *Mechanical Vibrations* (3.5 credits)

Prerequisite: EMAT 311; ENGR 370; MECH 343. Transient vibrations under impulsive shock and arbitrary excitation: normal modes, free and forced vibration. Multi-degree of freedom systems, influence coefficients, orthogonality principle, numerical methods. Continuous systems; longitudinal torsional and flexural free and forced vibrations of prismatic bars. Lagrange's equations. Vibration measurements. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 444 *Guided Vehicle Systems* (3 credits)

Prerequisite: MECH 443. Definition and classification of guided transportation systems. Track characterization: alignment, gage, profile, and cross-level irregularities. Wheel-rail interactions: rolling contact theories, creep forces. Modelling of guided vehicle components: wheel set, suspension, truck and car body configurations, suspension characteristics. Performance evaluation: stability hunting, ride quality. Introduction to advanced vehicles. Lectures: three hours per week.

MECH 445 *Machine Design* (4 credits)

Prerequisite: MECH 441. Design of springs; design of gear and hydraulic drives, design for hydrodynamics and hydrostatic lubrication; optimum design of mechanical systems, design strategy, value and merit function, maximizing and minimizing procedures. Laboratory work includes an advanced design project representative of those encountered in industry. Equivalent laboratory time: four hours per week, two terms. *NOTE: Not available for credit for students taking ENGR 481.*

MECH 446 *Process Equipment Design* (3 credits)

Prerequisite: MECH 321. Design of pressure vessels, towers, reactors, tanks, heat exchangers, piping systems, etc. as used in the petro-chemical, power generation, pulp and paper, and related industries. Compliance with pertinent codes and regulations; detailed analysis of shells, formed heads, flat closures; expansion

stresses; wind and earthquake effects. Application to actual problems from industry. Lectures: three hours per week.

MECH 447 *Fundamentals of Vehicle System Design* (3 credits)

Prerequisite: MECH 343. Mechanics and construction of wheels and tires: rolling resistance, tractive and braking forces, brake system design: components of mechanical, hydraulic and pneumatic brake systems, braking efficiency, antilock braking devices, performance characteristics of road vehicles: transmission design, driving condition diagrams, acceleration, speed and stopping distance, gradability, steering mechanisms: design and kinematics, suspension spring and shock absorbers: anti-roll and anti-pitch devices, chassis and body design considerations. Lectures: three hours per week.

MECH 448 *Vehicle Dynamics* (3 credits)

Prerequisite: MECH 447 previously or concurrently. Tire-terrain interactions; side-slip, cornering and aligning properties of tires; camber angle and camber torque; estimation of braking/tractive and cornering forces of tires; steady-state handling of road vehicles; steering response and directional stability; handling and directional response of vehicles with multiple steerable axles; handling of articulated vehicles; handling and directional response of tracked and wheeled off-road vehicles; directional response to simultaneous braking and steering. Lectures: three hours per week.

MECH 452 *Heat Transfer II* (3.5 credits)

Prerequisite: MECH 351, 352, 361. Heat exchangers. Condensation and boiling heat transfer. Principles of forced convection. Analysis of free convection from a vertical wall. Correlations for free convection in enclosed spaces. Mass transfer. Special topics of heat transfer. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 453 *Heating, Ventilation and Air Conditioning Systems* (3 credits)

Prerequisite: MECH 352. Heating and cooling load calculation. Overview of heating and air conditioning systems. Review: Vapour compression refrigeration cycles, refrigerant properties, psychometrics. Performance characteristic of components: evaporators, condensers, compressors, throttling devices (expansion valves, capillary tubes). System performance characteristics: calculation of system operating conditions based on the capacities of its components and outdoor and indoor conditions. Controls: operational, capacity. Computer-aided design methods. Defrosting. Estimation of energy consumption for heating with heat pumps. Fundamentals of refrigerant piping, water piping, and air distribution systems. Experimental methods for system development. Lectures: three hours per week.

MECH 454 *Vehicular Internal Combustion Engines* (3 credits)

Prerequisites: MECH 351, 361. Mechanical design of vehicular engines for different applications. Gas exchange and combustion engine processes. Combustion chambers design. Fuels for vehicular engines. Fuel supply, ignition and control systems. Cooling and lubrication of engines. Emissions formation and control. Engines' operational characteristics — matching with vehicles. Enhancement of engine performance. Engine testing. Environmental impact of vehicular engines on global pollution. Recent developments in energy efficient and “clean” engines. Design or calculation project of vehicular engine.

MECH 461 *Gas Dynamics* (3.5 credits)

Prerequisite: MECH 361. Review of one-dimensional compressible flow. Normal and oblique shock waves; Prandtl-Meyer flow; combined effects in one-dimensional flow; non-ideal gas effects; multi-dimensional flow; linearized flow; method of characteristics. Selected experiments in supersonic flow, convergent-divergent nozzles, hydraulic analogue and Fanno tube. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 462 *Turbomachinery and Propulsion* (3 credits)

Prerequisite: MECH 351, 361. Review of the gas turbine cycle and components arrangement. Types of turbo-propulsion for aircraft: turboprop, turbofan, and turbojet. Energy transfer in incompressible and compressible turbomachines: the Euler equation, velocity triangles. Axial-flow compressors; mean-line analysis. Mechanisms of losses in turbomachines. Three-dimensional motion in turbomachines; the radial equilibrium equation and its numerical solution by finite difference methods (computer project). Dimensional analysis of incompressible and compressible flow in turbomachines, compressor and turbine performance maps; surge and stall. Centrifugal compressors. Axial-flow turbines. Prediction of performance of gas turbines, components matching. Lectures: three hours per week.

MECH 463 *Fluid Power Control* (3.5 credits)

Prerequisite: ENGR 361, 372. Introduction to fluid power; pneumatic devices; fluidic devices; hydraulic system components; hydraulic and electro-hydraulic systems; dynamic performance of fluid power systems; fluid logic. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 464 *Aerodynamics* (3 credits)

Prerequisite: MECH 461. Flow conservation equations, incompressible Navier-Stokes equations, inviscid irrotational and rotational flows: the Euler equations, the potential and stream function equations. Dynamics of an incompressible inviscid flow field: the Kelvin, Stokes, and Helmholtz theorems. Elementary flows and their superposition, panel method for

non-lifting bodies. Airfoil and wing characteristics, aerodynamic forces and moments coefficients. Incompressible flows around thin airfoils, Biot-Savart law, vortex sheets. Incompressible flow around thick airfoils, the panel method for lifting bodies. Incompressible flow around wings, Prandtl's lifting line theory, induced angle and down-wash, unswept wings, swept wings. Compressible subsonic flow: linearized theory, Prandtl-Glauert equation and other compressibility correction rules, the area rule. Transonic flow: Von Karman's transonic small disturbance equation, transonic full potential equation, supercritical airfoils. Lectures: three hours per week.

MECH 465 *Gas Turbine Design* (3.5 credits)

Prerequisite: MECH 462; MECH 464 concurrently. Study of practical criteria which influence the design of a gas turbine engine, including relevant mechanical and aerodynamic constraints. The aerodynamics of each of the three major components of a modern turbo-fan engine, namely the compressor, the combustor, and the turbine is considered. Air system acoustics, engine aerodynamic matching of components, and modern performance testing methods. A design project is assigned for each of these components. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 471 *Microprocessors and Applications* (3.5 credits)

Prerequisite: ELEC 318 or MECH 372. Introduction to the concepts and practices of using microprocessors and microcomputers in such applications as instrumentation, manufacturing, control, and automation; architecture and programming techniques; interface logic circuits: I/O systems; case studies of engineering applications. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 480 *Flight Control Systems* (3 credits)

Prerequisite: ENGR 372. Basic flight control and flight dynamics principles. Aircraft dynamic equations and performance data. Implementation of aircraft control: control surfaces and their operations, development of thrust and its control; autopilot systems, their algorithms, dynamics and interaction problems. Flight instruments, principles of operation and dynamics. Cockpit layouts — basic configuration, ergonomic design, control field forces; advanced concepts in instruments, avionics and displays; HUD; flight management systems, and communication equipment. Introduction to flight simulation: overview of visual, audio and motion simulator systems; advanced concepts in flight simulators. Lectures: three hours per week.

MECH 481 *Materials Engineering for Aerospace* (3 credits)

Prerequisite: MECH 321. Different types of materials used in aerospace. Metals, composites,

ceramics. High temperature materials. Failure prediction and prevention. Modes of material failure, fracture, fatigue, creep, corrosion, impact. Effect of high temperature and multiaxial loadings. Cumulative damage in fatigue and creep. Materials selection. Lectures: three hours per week.

MECH 482 *Avionic Navigation Systems*
(3 credits)

Prerequisite: ENGR 372. Basics of modern electronic navigation systems, history of air navigation, earth coordinate and mapping systems; basic theory and analysis of modern electronic navigation instrumentation, communication and radar systems, approach aids, airborne systems, transmitters and antenna coverage; noise and losses, target detection, digital processing, display systems and technology; demonstration of avionic systems using flight simulator. Lectures: three hours per week.

MECH 490 *Capstone Mechanical Engineering Design Project*
(4 credits)

Prerequisite: 75 credits in the program;

ENGR 410 concurrently. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report by each student at the end of the Fall Term, a final report by the group and individual oral presentation at the end of the Winter Term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms.

NOTE: Students will work in groups under direct supervision of a faculty member.

MECH 498 *Topics in Mechanical Engineering* (3 credits)

Prerequisite: Permission of the Department chair. This course may be offered in a given year upon the authorization of the Mechanical Engineering Department. The course content may vary from offering to offering and will be chosen to complement the elective courses available in a given option or options. Lectures: three hours per week.

71.70 DEPARTMENT OF COMPUTER SCIENCE

Faculty	Chair H.F. LI, Professor	GRAHAM MARTIN LATA NARAYANAN JAROSLAV OPATRNY DAVID K. PROBST LIXIN TAO
	Professors VANGALUR S. ALAGAR J. WILLIAM ATWOOD TIEN D. BUI GREGORY BUTLER EUSEBIUS J. DOEDEL CLEMENT LAM JOHN MCKAY THIRUVENGADAM RADHAKRISHNAN RAJJAN SHINGHAL CHING Y. SUEN	Assistant Professors JOEY PAQUET JUERGEN RILLING
	Associate Professors SABINE BERGLER BIPIN C. DESAI TERRILL FANCOTT DAVID FORD GOSTA GRAHNE PETER GROGONO RAJAGOPALAN JAYAKUMAR S.L. KLASA ADAM KRZYZAK FRANZ KURFESS VIRAVANALLUR S. LAKSHMANAN TAO LI	Adjunct Professors T. KASVAND HANG T. LAU K. LIU
		Adjunct Associate Professors P. DINI WOJCIECH M. JAWORSKI L. LAM TAO LI FEREIDOOON SADRI MANAS SAKSENA Y.Y. TANG
		Adjunct Assistant Professors C. GROSSNER P. MUSTILLO G.C. PRABHAKAR
Location	Sir George Williams Campus J.W. McConnell Building, Room: LB 901-4 (514) 848-3000	
Objectives	<p>Computer Science is the study and design of computer systems: hardware and software. Computer scientists are primarily concerned with the design of algorithms, languages, hardware architecture, systems software, applications software and tools. Applications range from simple game playing to the control of space vehicles, power plants and factories, from banking machines to intelligent fault and medical diagnosis. Computer professionals, in short, are concerned with the creation of computer and information systems for the benefit of society.</p> <p>Software Engineering applies the principles and practices of engineering to the creation of reliable, efficient, and economical software. Software Engineering has its roots in the theory and mathematics of computer science, but carries this knowledge further towards creative applications such as software control systems for vehicles, aircraft, industrial processes; animation, interactive video, virtual reality, commercial systems for banking and financial analysis; health systems for the analysis of biological systems and the control of therapeutic systems.</p> <p>It shares with engineering the rigorous methodology of analysis and design in the search for economical, reliable, and efficient solutions. Software engineers are trained in all aspects of the software life cycle, from specification through analysis and design, to testing maintenance and evaluation of the product. They are concerned with safety and reliability of the product as well as cost and schedule of the development process. The discipline is particularly applicable to very large software projects, as well as the re-engineering of existing products.</p>	
71.70.1 Curriculum for the Degree of Bachelor of/Baccalaureate in Computer Science	<p>The Computer Science program emphasizes fundamentals and techniques that remain relevant and useful for many years after graduation. It consists of a combination of core courses in computer science, program courses attached to its options, and technical electives. The Computer Science Core provides a basic and broad study of theory, programming methodology, computer architecture, systems architecture, data structures, operating systems, files, databases, and software engineering. The option courses are designed to provide an integrated yet specialized training in particular application areas of the discipline. Each option involves the study of selected advanced elective</p>	

courses in computer science, as well as courses in other disciplines, to provide further depth in computer science and the particular application area.

The Department offers the following five options: Information Systems, Software Systems, Computer Systems, Computer Applications, and Digital Image/Sound. There is an Honours program corresponding to each option. All options are offered in the co-operative format, with alternating Study and Work terms, for a limited number of students with suitable qualifications.

The **Information Systems option** focuses on business applications of computer systems, with special emphasis on databases, software engineering, and management of information systems.

The **Software Systems option** is concerned with the design and analysis of large-scale software systems.

The **Computer Systems option** focuses on the design of systems with both hardware and software components.

The **Computer Applications option** balances 45 credits of Computer Science courses and 45 credits of courses in another discipline of the student's choice.

The **Digital Image/Sound option** combines Computer Science with a Major in Fine Arts for the design of interactive multi-media.

71.70.2
Degree
Requirements

To be recommended for the degree of BCompSc, students must satisfactorily complete an approved program of at least 90 credits comprising the courses of the Computer Science Core and those courses specified for their particular option in accordance with the graduation requirements of §71.10.5.

The Faculty of Engineering and Computer Science is committed to ensuring that its students possess good writing skills. Hence, every student in an undergraduate degree program is required to demonstrate competence in writing English or French. Students must sit for the University Writing Test in their first semester of studies. Permission to register for second-year and subsequent studies is contingent on proof of having written this exam. Students who do not pass the exam may continue in the program, but must register for remedial courses.

Students who are required to take ESL courses shall sit for the exam in the semester following completion of their language courses.

Computer Science Core

The Computer Science Core consists of 12 Computer Science courses (39 credits):
COMP 228³, 229³, 238³, 239³, 248³, 249³, 326³, 335³, 346⁴, 352³, 353⁴, 354⁴.

1. Information Systems Option

- 39 Computer Science Core
- 3 ENCS 282³
- 9 Elective Computer Science credits chosen from COMP courses numbered above 300 (See Note 1.)
- 33 ECON 201³, 203³, COMM 210³, 215³, 217³, 220³, 222³, 224³, 225³, 305³, 308³
- 6 Elective credits from any department with at most three credits from the Faculty of Commerce and Administration (See Note 2.)

2. Software Systems Option

- 39 Computer Science Core
- 3 ENCS 282³
- 21 Elective Computer Science credits chosen from COMP courses numbered above 300 (See Note 1.)
- 12 MATH 244³, 251³, STAT 249³, 250³
- 15 Elective credits from any department (See Note 2.)

3. Computer Systems Option

- 39 Computer Science Core
- 3 ENCS 282³
- 9 Elective Computer Science credits chosen from COMP courses numbered above 300 (See Note 1.)
- 30.75 EMAT 212³, ENGR 273^{3,75}, ELEC 311^{4,5}, COMP 361³, 327⁴, 445⁴, ENCS 455⁴, COEN 418^{4,5}
- 8.25 Elective credits from any department (See Note 2.)

4. Computer Applications Option

- 39 Computer Science Core
- 3 ENCS 282³
- 3 Elective Computer Science credits chosen from COMP courses numbered above 300 (See Note 1.)
- 45 Elective credits from any department (See Notes 2 and 3.)

5. Digital Image/Sound Option

See §71.80 for details

NOTES:

1. Students may obtain permission from the Department to take no more than two COMP courses numbered between 600 and 699 in this category. Credits obtained from these courses count towards the BCompSc degree and are not creditable towards a higher degree.
2. Certain courses are not acceptable as electives. The Undergraduate Program Guide lists excluded courses and provides additional information about the choice of electives. In exceptional cases, students may obtain permission to take an excluded course from the Associate Dean (Student Affairs).
3. At least 24 credits of the 45 elective credits in the Computer Applications Option must be part of a degree program leading to a Minor or Major in a chosen subject.

71.70.3
Extended Credit
Program

Students admitted to an Extended Credit Program under the provisions of Sections 13.3.2 or 13.8.1 must successfully complete a minimum of 120 credits including:

- 90 Program requirements as set out in Section 71.70.2
- 12 MATH 202³, 203³, 204³, 205³
- 3 COMP 201³
- 15 Additional credits, as indicated below:
 - a) *Information Systems Option:*
15 elective credits chosen from outside the Faculty of Commerce and Administration and the Department of Computer Science.
 - b) *Computer Applications Option:*
15 elective credits chosen from outside the Faculty of Engineering and Computer Science.
 - c) *Other Options:*
CHEM 205³
PHYS 204³, 205³, 224¹, 225¹
and at least four credits chosen from:
BIOL 201³, CHEM 206³, ECON 201³, 203³, ESL 207³, 208³, PHYS 206³, 207³, 226¹

71.70.4
Honours Program

Students should refer to §16.2.3 of the Calendar for academic regulations for the Honours program. The following regulations are additional requirements for the Honours BCompSc Program.

1. Applications to enter an Honours program must be submitted to the Office of the Associate Dean (Student Affairs) at least three months before the start of the term in which the student wishes to enter an Honours program.
2. Students must complete at least 30 credits towards their degree before entering an Honours program.
3. Each student in an Honours program must have an Honours adviser who approves the student's choice of courses prior to each registration.
4. Students must maintain an Annual Weighted Grade Point Average (GPA) of 3.20 or higher to remain in an Honours program.
5. Students who are required to withdraw from an Honours program may continue in the regular program of their option provided they are in acceptable or conditional standing according to the academic regulations in §71.10.3.

Course Requirements for Honours Programs

Honours students must fulfil the requirements of their option. In addition to these requirements, they must include COMP 490 and COMP 495 in their Computer Science electives.

71.70.5
Minor in Computer
Science

NOTE: Admission profile is 10.12.

Minor in Computer Science

- 21 COMP 228³, 229³, 238³, 239³, 248³, 249³, 352³
- 3 300-400 level Computer Science elective credits.

71.70.6
Programs Related to
Computer Science

Both Major and Minor programs in Management Information Systems can be found in the Commerce and Administration Section of the Undergraduate Calendar, §61. The Faculty of Fine Arts and the Department of Computer Science offer complementary Major programs. Students who take the Computer Applications Option (see §71.70.2 above) can also take the Major in Digital Image/Sound and the Fine Arts (see §71.80, and the Fine Arts Section, §81).

71.70.7
The Co-operative
Format

Director
R. JAYAKUMAR, Associate Professor

Students entering any option of the program leading to the BCompSc degree may request permission to undertake their studies in the co-op format by following the application procedure specified in §24. Academic content is identical to that of the regular program, but six Study terms are interspersed with four Work terms. Students are supervised personally and must meet the requirements specified in §71.10.8 in order to continue their studies in the co-op format. Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Computer Science co-op committee, which includes the student's advisers. Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

71.70.8
Curriculum for the
Degree of BEng in
Software Engineering

The Software Engineering program is built on the fundamentals of computer science, an engineering core, and a discipline core in Software Engineering to cover the engineering approach to all phases of the software process and related topics.

The curriculum builds on the traditional computer science core topics of computer mathematics, theory, programming methodology, and mainstream applications to provide the computing theory and practice which underlie the discipline. The engineering core covers basic science, professional topics, and introduces the engineering approach to problem solving. The program core in Software Engineering includes advanced programming techniques, software specification, design, architecture, as well as metrics, security, project management, and quality control. The elective groups cover a broad range of advanced topics, from formal methods to distributed systems.

71.70.9
Degree Requirements
for the BEng in
Software Engineering

Students registered in the Software Engineering program must complete a minimum of 118.25 credits during four years of full-time study. The program consists of the Engineering Core, the Software Engineering Core, and an Elective Group.

Engineering Core (See §71.20.3)

Credits

EMAT 213	Ordinary Differential Equations	3.00
EMAT 233	Advanced Calculus	3.00
EMAT 391	Numerical Methods in Engineering	3.00 (1)
ENCS 282	Technical Writing and Communication	3.00
ENGR 275	Principles of Electrical Engineering	3.75
ENGR 371	Probability and Statistics in Engineering	3.00
ENGR 402	Engineering Law	1.50
ENGR 492	Impact of Technology on Society	3.00
	General Education elective	3.00

26.25

NOTES:

(1) Software Engineering students may replace EMAT 391 with COMP 361.

Software Engineering Core (70.50 credits)

Credits

COMP 228	System Hardware	3.00
COMP 229	System Software	3.00
COMP 238	Mathematics for Computer Science I	3.00
COMP 239	Mathematics for Computer Science II	3.00
COMP 248	Introduction to Programming	3.00
COMP 249	Programming Methodology	3.00
COMP 335	Introduction to Theoretical Computer Science	3.00
COMP 346	Operating Systems	4.00
COMP 352	Data Structures and Algorithms	3.00
COMP 353	Databases	4.00
COMP 445	Data Communications and Computer Networks	4.00
ENGR 401	Engineering Economics and Management Principles	1.50
SOEN 321	Information Systems Security	3.00
SOEN 337	Metrics and Measurement in Software Development	3.00
SOEN 341	Software Process	3.00
SOEN 342	Software Requirements and Specifications	3.00
SOEN 343	Software Design	3.00
SOEN 344	Software Architecture	4.00
SOEN 345	Software Quality Control	4.00
SOEN 357	User Interface Design	4.00
SOEN 383	Software Project Management	3.00
SOEN 490	Software Engineering Design Project	3.00

70.50

To complete the option, students must choose a minimum of 21 credits from one of the following elective groups.

Group 1. Software Applications

Students must complete the following two courses:

		<i>Credits</i>
ENCS 245	Mechanical Analysis	3.00

One of the following:

BIOL 226	Biodiversity and Ecology	3.00
CHEM 234	Physical Chemistry I: Thermodynamics	3.00
PHYS 253	Electricity and Magnetism I	3.00

and a minimum of 15 credits chosen from the following courses:

COMP 442	Compiler Design	3.00
COMP 451	Database Design	3.00
COMP 471	Computer Graphics	4.00
COMP 472	Artificial Intelligence	4.00
COMP 473	Pattern Recognition	3.00
COMP 474	Introduction to Expert Systems	4.00
SOEN 431	Formal Methods	3.00
SOEN 449	Component Engineering	3.00
SOEN 475	Imaging and Visualization	3.00

Group 2. Software Systems Design

Students must complete the following two courses:

		<i>Credits</i>
ENCS 245	Mechanical Analysis	3.00

One of the following:

BIOL 226	Biodiversity and Ecology	3.00
CHEM 234	Physical Chemistry I: Thermodynamics	3.00
PHYS 253	Electricity and Magnetism I	3.00

and a minimum of 15 credits chosen from the following courses:

COEN 418	Real-Time System Design	4.50
COMP 327	Digital System Design	4.00
COMP 444	System Software Design	4.00
COMP 465	Design and Analysis of Algorithms	3.00
SOEN 422	Embedded Systems and Software	3.00
SOEN 423	Distributed Systems	3.00
SOEN 448	Management of Evolving Systems	3.00

Group 3. Building Studies

Students must complete the following courses:

		<i>Credits</i>
BLDG 341	Building Engineering Systems	3.00
BLDG 366	Acoustics and Lighting	3.50
BLDG 459	Computer-Aided Building Design	3.00
CIVI 341	Civil Engineering Systems	3.00
ENCS 245	Mechanical Analysis	3.00
MECH 221	Materials Science	2.00
		<hr/> 17.50

71.70.10
The Co-operative
Format

Director
R. JAYAKUMAR, Associate Professor

Students entering any option of the program leading to the BEng in Software Engineering degree may request permission to undertake their studies in the co-op format by following the application procedure specified in §24.

Academic content is identical to that of the regular program, but six Study terms are interspersed with four Work terms.

Students are supervised personally and must meet the requirements specified in §71.10.8 in order to continue their studies in the co-op format. Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Computer Science co-op committee, which includes the student's advisers. Please refer to §24 for the schedule of Study and Work terms and the full description of admission requirements.

71.70.11
Course Descriptions

Please note that new course numbers have been implemented. For equivalent course numbers under the old system, please consult §200.6

Students from outside the Faculty of Engineering and Computer Science who are not registered in a Computer Science program may not take more than five COMP courses numbered higher than 212. Students from outside the Faculty of Engineering and Computer Science who are registered for the Minor in Computer Science may not take more than 30 credits of COMP courses numbered higher than 212.

COMPUTER SCIENCE

COMP 201 *Introduction to Computers and Computing* (3 credits)

Prerequisite: MATH 201 or equivalent. Overview of a computing system and its operation. Introduction to problem solving and algorithms. Introduction to program design and development with emphasis on common problem solution. A programming language will be introduced to develop and convey the above topics. Lectures: three hours per week. Tutorial: one hour per week.

NOTES: 1. Students who have received credit for COMP C211 or COMP 212 or COMP 215 or COMP 248 may not take this course for credit. 2. This course may not be taken for credit in the regular undergraduate programs in Engineering and Computer Science.

COMP 212 *FORTRAN for Engineers and Scientists* (3 credits)

Prerequisite: MATH 204 or cégep Mathematics 105; MATH 205 or cégep Mathematics 203.

Note: It is also assumed that students have had some exposure to computers, either through a cégep course or through exposure to personal computers. A brief introduction to computers and computing systems. A thorough grounding in the use of FORTRAN 77 as a tool for the solution of engineering and scientific problems. Introduction to the principles of software engineering: problem specification, requirements analysis, program design with emphasis on structured programming, testing, and validation; program documentation. Lectures: three hours per week. Tutorial: one hour per week.

NOTES: 1. Students having credit for a FORTRAN programming course from cégep with a mark of at least 85% may, during the first two weeks of the course, apply to the course coordinator to undertake a FORTRAN programming project appropriate to their field of study in lieu of the normal requirements of the course. 2. Students in the BCompSc program may not take this course for credit.

COMP 218 *Fundamentals of Object-Oriented Programming* (3 credits)

Prerequisite: MATH 201 or equivalent (no prior

experience with computers is assumed).

Computers and computing: problem solving with computers; programming; basic elements of an Object-Oriented language: basic data types, objects, expressions, predefined functions for I/O; simple programs; program documentation; control structures; functions: simple library functions; arrays: one- and two-dimensional arrays of basic types; classes of objects: analysis and design of classes, implementation of classes.

NOTE: This course should not be taken by students who have taken COMP 248.

NOTE: Students who have received credit for COMP 248 may not take this course for credit.

COMP 228 *System Hardware* (3 credits)

Prerequisite: MATH 203 or 209 or cégep Mathematics 103, MATH 204 or 208 or cégep Mathematics 105. Processor structure, Data and Instructions, Instruction Set Processor (ISP) level view of computer hardware, assembly language level use. Memory systems — RAM and disks, hierarchy of memories. I/O organization, I/O devices and their diversity, their interconnection to CPU and Memory. Communication between computers at the physical level. Networks and computers. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for COMP 220 may not take this course for credit.

COMP 229 *System Software* (3 credits)

Prerequisite: COMP 228; COMP 248. Hardware-software interface, system kernel, system services, system evolution. Assemblers, compilers, linkers, and loaders. System component interfaces. User-level view of operating systems. Lectures: three hours per week. Tutorial: one hour per week.

COMP 238 *Mathematics for Computer Science I* (3 credits)

Prerequisite: MATH 203 or MATH 209 or cégep Mathematics 103, MATH 204 or MATH 208 or cégep Mathematics 105. Sets, Propositional Logic, Predicate Calculus, Boolean Algebra. Functions and Relations. Functions. Proof Techniques, including proof by induction.

Lectures: three hours per week. Tutorial: one hour per week.
NOTE: Students who have received credit for COMP 231 may not take this course for credit.

COMP 239 Mathematics for Computer Science II (3 credits)

Prerequisite: COMP 238; MATH 205 or cégep Mathematics 203 previously or concurrently. Counting and Number theory. Permutations and combinations. Graph theory and finite state machines. Program correctness and analysis. Lectures: three hours per week. Tutorial: one hour per week.

COMP 248 Introduction to Programming (3 credits)

Prerequisite: MATH 204 or MATH 208 or cégep Mathematics 105. Writing simple programs using assignment and sequence. Variables. Simple types. Operators and expressions. Conditional and repetitive statements. Input and output. Simple functions. Program structure and organization. Definition and scope. Data abstraction and encapsulation. Introduction to classes and objects. Constructors. Lectures: three hours per week. Tutorial: one hour per week.
NOTE: Students who have received credit for COMP 215 or COMP 218 may not take this course for credit.

COMP 249 Programming Methodology (3 credits)

Prerequisite: COMP 238; COMP 248; MATH 205 or cégep Mathematics 203. Class definitions. Designing classes and member functions. Class libraries and their uses. Input and output. Program development. Introduction to software engineering. Specification and implementation. Inheritance. Lectures: three hours per week. Tutorial: one hour per week.
NOTE: Students who have received credit for COMP 245 may not take this course for credit.

COMP 251 Introduction to Business Programming (3 credits)

Prerequisite: Cégep 420-911 or equivalent. Introduction to business data processing. Basic file organization and handling, record layouts, elementary information storage and retrieval. Detailed specifications of the Common Business Oriented Language (COBOL). Structured programming concepts will be emphasized. This course will include programming assignments involving basic business applications, to be prepared, tested, and documented individually. Lectures: three hours per week. Tutorial: one and a half hours per week.
NOTE: Restricted to students registered in a Commerce and Administration program.

COMP 326 Computer Architecture (3 credits)

Prerequisite: COMP 346. Classification schemes. Functional units, bussing systems and input/output structures, storage systems, instruction sets. Microprogramming. Survey of

different kinds of computer architectures. Software influences on architecture. Advanced topics in computer architecture. Lectures: three hours per week. Tutorial: one hour per week.

COMP 327 Digital System Design (4 credits)

Prerequisite: COMP 228 or COEN 311. Reduction of Boolean expressions. Digital integrated circuits. Combinatorial circuits. Sequential logic, counters, shift registers. Microprocessors. Interfacing with external devices. Lectures: three hours per week. Laboratory: two hours per week. Tutorial: one hour per week.
NOTE: Students who have received credit for COMP 325 or COEN 312 may not take this course for credit.

COMP 335 Introduction to Theoretical Computer Science (3 credits)

Prerequisite: COMP 239 or COEN 231; COMP 249 or COEN 244. Finite state automata and regular languages. Push-down automata and context-free languages. Pumping lemmas. Applications to parsing. Turing machines. Undecidability and decidability. Lectures: three hours per week. Tutorial: one hour per week.

COMP 346 Operating Systems (4 credits)

Prerequisite: COMP 229 or COEN 311; COMP 352. Operating system evolution and services. Process management: concepts of processes, concurrent languages, process states, process communication, operating system structure, processor scheduling, monitors. System management: virtual memory, resource allocation, queue management, communication with peripherals, exception handling. File systems. Interactive computation. Protection. Distributed systems. Lectures: three hours per week. Laboratory: two hours per week. Tutorial: one hour per week.
NOTE: Students who have received credit for COMP 343 or COMP 385 may not take this course for credit.

COMP 348 Principles of Programming Languages (3 credits)

Prerequisite: COMP 249. Programming paradigms: procedural, object-oriented, functional, and logical. Values and references; function calling and parameter passing mechanisms. Issues in typing: static and dynamic typing; weak and strong typing. Polymorphism and genericity. Exception handling techniques. Stacks, heaps, and memory management. Lectures: three hours per week. Tutorial: one hour per week.

COMP 352 Data Structures and Algorithms (3 credits)

Prerequisite: COMP 239 or COEN 231; COMP 249 or COEN 244. This course will emphasize the definition, usage, and manipulation of fundamental data structures and their associated algorithms: stacks and queues, trees, tables, lists, arrays, strings, sets; and will

introduce files and access methods. External sorting, B-trees, multi-key organizations. Lectures: three hours per week. Tutorial: one hour per week.

COMP 353 Databases (4 credits)

Prerequisite: COMP 352. Classical database management: modelling, data integrity, data independence and security, ANSI/SPARC architecture, data models (relational, hierarchical, and network), database design, detailed study of the relational model. Lectures: three hours per week. Laboratory: two hours per week. Tutorial: one hour per week.

COMP 354 Software Engineering I
(4 credits)

Prerequisite: COMP 352. Principles of software development and maintenance. Software lifecycle models and deliverables: requirements analysis and specification, architectural and detailed design, implementation, verification and validation. People, product, and process issues: team dynamics, communication, presentations, reviews. Lectures: three hours per week. Laboratory: two hours per week. Tutorial: one hour per week.
NOTE: Students who have received credit for COEN 431 may not take this course for credit.

COMP 361 Elementary Numerical Methods
(3 credits)

Prerequisite: COMP 239 or COEN 231; COMP 249 or COEN 244. Error analysis and computer arithmetic. Numerical methods for solving linear systems, Gaussian elimination, LU decomposition. Numerical solution of non-linear equations, fixed point iterations, rate of convergence. Interpolations and approximations, Lagrange polynomials, divided differences, discrete least-square approximation, Legendre polynomials. Numerical integration, Newton-Cotes formulas, Romberg integration. Emphasis will be on the development of efficient algorithms. Lectures: three hours per week. Tutorial: one hour per week.

COMP 367 Techniques in Symbolic Computation (3 credits)

Prerequisite: COMP 238 or MAST 217; COMP 248 or MAST 234. An application-oriented introduction to symbolic computation, as it is used in algebra, number theory and combinatorics: capabilities of symbolic systems (e.g. MAPLE); arithmetic mod p and mod m ; Chinese remainder theorem; finite fields; error-correcting codes; continued fractions; public-key encryption schemes (e.g. RSA); generation of combinatorial objects.
NOTE: Students who have received credit for MAST 332 may not take this course for credit.

COMP 421 Microprocessor Systems Architecture (4 credits)

Prerequisite: COMP 327 or equivalent. Micro-computer families. Memory interface. I/O systems. Peripheral control. Single-chip microprocessors. Coprocessors. System busses. Board level

design. Multicomputer systems. Communication architecture. Lectures: three hours per week. Laboratory: two hours per week.

NOTE: Students who have received credit for COMP 427 or COMP 486 may not take this course for credit.

COMP 442 Compiler Design (3 credits)

Prerequisite: COMP 229 or COEN 311; COMP 335; COMP 352. Compiler organization and implementation. Programming language constructs, their syntax and semantics. Syntax directed translation, code optimization. Run-time organization of programming languages. Lectures: three hours per week.

COMP 444 System Software Design
(4 credits)

Prerequisite: COMP 346. Detailed examination of data structures and algorithms of a contemporary operating system: file system, processes, memory management, device management. Comparison of techniques used with those employed in other operating systems. Lectures: three hours per week. Laboratory: two hours per week.

COMP 445 Data Communication and Computer Networks (4 credits)

Prerequisite: COMP 346. The study of remote access to and communications between computers. Network architectures and topology; communication protocols and interfaces, functional layers; transmission facilities including communications equipment, line utilization, switching, and error handling; standard protocols; network interfaces including routing and flow control; point-to-point, broadcasting, and local networks theory and current practice; high-level protocols; reliability and security, encryption. Lectures: three hours per week. Laboratory: two hours per week.

COMP 451 Database Design (3 credits)

Prerequisite: COMP 353. Review of the relational data model and introduction to distributed databases. DBMS architectures. Data dependencies, decomposition algorithms. Data dictionaries. Concurrency, integrity, security, and reliability issues. Query decomposition, optimization, and evaluation strategies. Physical database design. Lectures: three hours per week.

COMP 454 Software Engineering II
(3 credits)

Prerequisite: COMP 335; COMP 353; COMP 354. Issues of quality and productivity in software engineering. Software engineering principles for the development of complex systems: cost and schedule estimation, software metrics, software process models, team organization. Formal specification techniques. Quality of process and products: reviews, inspections, testing, statistical reliability estimation, formal methods. Lectures: three hours per week.

COMP 457 Office Automation (3 credits)

Prerequisite: COMP 352. Design of an office automation system. Technical aspects of some

office functions. Petri nets. Communication networks. Interface design. Security and cryptography. Future developments. Lectures: three hours per week.

COMP 458 *Structure of Information Systems* (3 credits)

Prerequisite: COMP 353. Information systems and organizations. Representation and analysis of system structure. Decision theory. Information system applications. Information centres. System evaluation and selection. Lectures: three hours per week.

COMP 463 *Discrete System Simulation* (3 credits)

Prerequisite: COMP 249 or COEN 244; MATH 243 or ENGR 371 or COMM 215. Discrete random variables and their distributions. A comparison of simulation techniques: discrete, continuous, and hybrid. Queueing models, analysis of data. Model building. Review of simulation languages. Application to business problems and operations research. Lectures: three hours per week.

COMP 465 *Design and Analysis of Algorithms* (3 credits)

Prerequisite: COMP 335; COMP 352. Empirical and theoretical measures of the efficiency of algorithms. Algorithm design techniques. A study of good algorithms related to set operations, sorting, and graph theory. A survey of hard problems, NP-completeness, and intractable problems. Lectures: three hours per week.

COMP 471 *Computer Graphics* (4 credits)

Prerequisite: COMP 352. Display memory; generation of points, vectors, etc. Interactive versus passive graphics; CRT devices and plotters, analog storage of images. Digitizing and digital storage. Pattern recognition. Data structures and graphics software. The mathematics of three-dimensional transformations; projections. Applications in computer-aided design and instruction. Lectures: three hours per week. Laboratory: two hours per week.

COMP 472 *Artificial Intelligence* (4 credits)

Prerequisite: COMP 352. Scope of AI. Heuristics. Problem-solving methodologies. Game-playing. Reasoning by deduction and induction. Natural language processing. Lectures: three hours per week. Laboratory: two hours per week.

COMP 473 *Pattern Recognition* (3 credits)

Prerequisite: COMP 352. Sequential and parallel recognition methodologies. Preprocessing. Feature extraction and selection. Syntactic and statistical approaches. Discriminant functions. Techniques for learning. Bayesian decision procedures. Neural nets. Lectures: three hours per week.

COMP 474 *Introduction to Expert Systems* (4 credits)

Prerequisite: COMP 352. Basic concepts and

techniques. Knowledge representation in inferencing. Building a small expert system. Knowledge engineering and large system development. Survey of tools and expert systems. The expert system market. Lectures: three hours per week. Laboratory: two hours per week.

COMP 490 *Computer Science Project I* (3 credits)

Prerequisite: Completion of 60 credits. Students will work on a computer science project under the supervision of a faculty member and submit a suitable written report on the work carried out. Students planning to register for this course should consult with the Department prior to registration in the final year of study.

COMP 492 *Computer Science Project II* (3 credits)

Prerequisite: COMP 490 previously or concurrently. Students having permission of the Department to carry out a major project will register for both COMP 490 and 492. Alternatively, they may carry out a second smaller project.

COMP 495 *Honours Seminar* (1 credit)

Prerequisite: Registration in final year of the Honours program. Students are required to attend a number of departmental seminars (initially ten) and submit a written report on one of them. There will be an administrator in charge of this course.

SOFTWARE ENGINEERING

SOEN 282 *Document Processing* (2 credits)

Prerequisite: ENCS 281. Document processing software; choice of appropriate tools. Preparing reports with the aid of a spreadsheet. Using Internet facilities for group collaboration, including the construction of shared hypertext. Extraction of documentation from source code. Configuration management. Principles and use of markup languages such as SGML and HTML. Documentation standards such as ISO 9000. Lectures: two hours per week. Tutorial: two hours per week.

SOEN 321 *Information Systems Security* (3 credits)

Prerequisite: COMP 346. Protocol layers and security protocols. Intranets and extranets. Mobile computing. Electronic commerce. Security architectures in open-network environments. Cryptographic security protocols. Threats, attacks, and vulnerabilities. Security services: confidentiality; authentication; integrity; access control; non-repudiation; and availability. Security mechanisms: encryption; data-integrity mechanisms; digital signatures; keyed hashes; access-control mechanisms; challenge-response authentication; traffic padding; routing control; and notarization. Key-management principles. Distributed and embedded firewalls. Security zones. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 337 *Metrics and Measurement in Software Development*
(3 credits)

Prerequisite: ENGR 371. Theory of measurement and metrics. Experimental design and data analysis. Operational profiles and usage specifications. Statistical usage testing and reliability estimates. Estimation of project parameters. Defect tracking; six sigma. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 341 *Software Process* (3 credits)

Prerequisite: COMP 229, 352; SOEN 282 or ENCS 282. Basic principles of software engineering. Introduction to software process models. Activities in each phase, including review activities. Working in teams: organization; stages of formation; roles; conflict resolution. Introduction to notations used in software documentation. How to read, review, revise, and improve software documentation. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 342 *Software Requirements and Specifications* (3 credits)

Prerequisite: SOEN 341. Requirements engineering. Functional and non-functional requirements. Traceability. Test generation. Formal and informal specifications. Formal specification languages. Reasoning with specifications. Correctness issues. Verification. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 343 *Software Design* (3 credits)

Prerequisite: SOEN 341. Design notations and methodologies. Design principles: information hiding; coupling and cohesion. Object-oriented design with current formal and informal notations. Scenario-based design, and the role of use cases. Design patterns. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 344 *Software Architecture*
(4 credits)

Prerequisite: SOEN 343. Information hiding, dependencies, layers, partitions. Architecture descriptive notations. Common architectural styles. Components, patterns, and frameworks. Fundamental structures for architectures: layers; partitions; uses relation; client-supplier relation; peer-to-peer relation; callbacks. Roles and views of architecture. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

SOEN 345 *Software Quality Control*
(4 credits)

Prerequisite: SOEN 337, 341, 371. Testing: acceptance testing; integration testing; module testing; and writing stubs. Verification and validation. Statistical techniques. Defect tracking, causality analysis. Reviews, inspections, walk-throughs. Exception handling. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

SOEN 357 *User Interface Design*
(4 credits)

Prerequisite: SOEN 342. The human side: I/O; memory; and information processing. Interaction: mental models; human error; interaction frameworks and paradigms. Direct manipulation. User interface design: principles; standards; and guidelines. User-centred design: standards and design rationale; heuristic evaluation; iterative design; and prototyping. Task-centred design. Rationalized design: usability engineering; dialogue notations; user models; diagrammatic notations; and textual notations. Evaluation: with the user; without the user; quantitative; and qualitative. Implementation support. Help and documentation. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

SOEN 383 *Software Project Management*
(3 credits)

Prerequisite: SOEN 282, 337, 341. Organization of a large software project. Roles of team members, team leaders, and managers. Scheduling; tools for monitoring and maintaining a schedule. Budget control. Progress monitoring. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 402 *Engineering and Software Law*
(1.5 credits)

Prerequisite: ENCS 281. A review of laws, in Québec and elsewhere, relating to engineering in general and software systems in particular. Registration, property, right and restrictions of ownership, contracts, civil responsibility, copyright, patenting. Lectures: one and a half hours per week.

SOEN 422 *Embedded Systems and Software* (3 credits)

Prerequisite: COMP 346. Characteristics of embedded systems. Microcontroller architecture and typical target systems. Programming issues related to mixed languages. Real-time kernel services: task management; intertask communication and synchronization; memory management; time management; interrupt support; configuration; and initialization. Development methods: state machines and fuzzy logic. Debugging methods for interrupts. Testing and simulation methods. Lectures: three hours per week.

SOEN 423 *Distributed Systems* (3 credits)

Prerequisite: COMP 346. Introduction to the theory of distributed systems and networks. Distributed system and network characteristics: failure; delay/asynchrony; and throughput. Types of network interaction. Fault tolerance. Recovery from failure. Lectures: three hours per week.

SOEN 431 *Formal Methods* (3 credits)

Prerequisite: SOEN 342, 343. Components of formal systems. Formal methods; levels of formalism. Integrating formal methods into the existing software life-cycle process model for a

given project. Attributes of a formal specification language. Formal notations based on extended finite state machines; case studies involving the design of user interfaces, reactive systems, and concurrent systems. Software development using formal methods, including tools for: type checking; debugging; verifying checkable properties; validation of refinements; and code generation from refinements. Lectures: three hours per week.

SOEN 448 *Management of Evolving Systems* (3 credits)

Prerequisite: SOEN 342, 343, 344. Software maintenance: corrective; perfective; and adaptive. Software reuse; construction of reusable software. Techniques for reverse engineering and re-engineering software. Software development as "growing" software. Long-term evolution of software systems. Legacy systems. Lectures: three hours per week.

SOEN 449 *Component Engineering* (3 credits)

Prerequisite: SOEN 344. Review of high-level

language concepts and abstraction mechanisms. Programming with functional and logical languages. Typed vs. untyped languages. The use of scripting languages and other language-based techniques to assemble systems from high-level components. Lectures: three hours per week.

SOEN 475 *Imaging and Visualization* (3 credits)

Prerequisite: COMP 371, 471. Graphical application programmer interfaces. Generating images from two- and three-dimensional data. Review of simulation techniques. Application of advanced graphics techniques to mathematics, physics, engineering, medicine, and other areas. Lectures: three hours per week.

SOEN 490 *Software Engineering Design Project* (3 credits)

Prerequisite: SOEN 342, 343, 344, 345; ENGR 410 concurrently. Students will work in teams of 10 to 12 members to construct a significant software application. Team members will give a presentation of their contribution to the project. Laboratory: six hours per week.

71.80 **DIGITAL IMAGE/SOUND AND COMPUTER SCIENCE**

<i>Faculty</i>	<i>Undergraduate Program Director</i> THIRUVENGADAM RADHAKRISHNAN, <i>Professor</i>
<i>Location</i>	<i>Sir George Williams Campus</i> J.W. McConnell Building, Room: LB 901-4 (514) 848-3053
<i>Objectives</i>	The Faculty of Engineering and Computer Science and the Faculty of Fine Arts have created a program of study which combines a comprehensive education in computer science and a complementary set of courses in the fine arts. This program resides in both Faculties. In the Faculty of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/ Baccalaureate in Computer Science, Computer Applications Option. According to their preferences and aspirations, students may apply either for a Bachelor of/Baccalaureate in Computer Science program, or a Bachelor of/Baccalaureate in Fine Arts program. The Fine Arts offering is described in §81.90. The Computer Science program is described below.
<i>Curriculum</i>	<p>The Computer Applications Option may be taken with either a Major or a Minor in Digital Image/Sound and the Fine Arts. The Major program consists of the Computer Science Core complemented by 45 credits of study in Fine Arts. It is intended for students with aptitudes in the two areas, and provides a unique education combining depth in computer science knowledge and skills with a full major program in Fine Arts. The Minor program is intended for students whose principal interest and aptitude is in the area of computer science, but who wish to further develop their talents in the fine arts for their personal or career goals. It provides 30 credits in Fine Arts and 15 elective credits to complement the 45 credits of the Computer Science Applications Option. Students taking the Minor may use these 15 elective credits to enhance their training through additional Computer Science courses, or they may choose electives from other approved areas in the University, such as Arts, Science or Commerce and Administration.</p> <p>The Major and the Minor programs in Digital Image/Sound and the Fine Arts provide students with a knowledge and understanding of digital media concepts, and authoring and scripting for the design of interactive multi-media.</p>
<i>Structure of the Programs</i>	<p>The Major and Minor in Digital Image/Sound are based on the Computer Applications Option. This Option is defined as follows (see §71.70.2).</p> <p>Computer Applications Option</p> <ul style="list-style-type: none"> 39 Computer Science Core 3 ENCS 282³ 3 Elective Computer Science credits chosen from COMP courses numbered above 300 45 Elective credits <p>The Major in Digital Image/Sound and the Fine Arts allocates these elective credits as follows:</p> <ul style="list-style-type: none"> 45 credits 6 FFAR 250⁶ 6 DFAR 350⁶ 6 DFAR 450⁶ 12-15 Chosen from DART 200⁶; EAMT 205⁶; FMAN 304⁹; IDYS 200⁶; PHOT 200⁶; or one of the ARTX courses 12-15 Chosen from Design Art; Film Animation; Interdisciplinary Studies; Music; and Photography in consultation with an adviser and according to a recommended list of courses <p>The Minor in Digital Image/Sound and the Fine Arts allocates these elective credits as follows:</p> <ul style="list-style-type: none"> 30 credits 6 FFAR 250⁶ 6 DFAR 350⁶ 6 DFAR 450⁶

- 6-12 Chosen from DART 200⁶; EAMT 205⁶; FMAN 304⁹; IDYS 200⁶; PHOT 200⁶; or one of the ARTX courses
- 6-12 Chosen from Design Art; Film Animation; Interdisciplinary Studies; Music; and Photography in consultation with an adviser and according to a recommended list of courses

*Admission
Requirements*

The Digital Image/Sound Major and Minor are limited to students who are enrolled in or simultaneously applying for the Computer Science Applications Option and who are qualified for the Fine Arts component. Applicants must fulfil the admission requirements for the Computer Science Option in Computer Applications (see §71.10.2) and be accepted into the Computer Applications Option.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Digital Image/Sound and the Fine Arts. All applicants must submit to the Program Office, Visual Arts Building, Room 257, between March 7 – 20, 2001:

1. a *letter of intent*;
 2. a copy of their most recent transcript;
 3. a *portfolio* consisting of written, two-dimensional, three-dimensional and time-based work;
 4. include excerpts of typed writing samples, two-dimensional work; 10–20 slides; and/or video, maximum 10 minutes (VHS, HI-8mm or 8mm only); and/or a sound tape (analog or DAT), maximum 10 minutes; and/or CD-ROM, KODAK Photo-CD, data cartridge (Syquest, ZIP) or diskette (must be Macintosh compatible); and/or URL reference to a Web site;
 5. two-dimensional works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form;
 6. individual works must be labelled including applicant's name, date, size of work, and medium(s) used. Applicants should indicate clearly what is to be reviewed. In the case of computer files, applicants must list precisely the directory/folder or pathname which contains the file(s); the complete file name(s) with extension (if relevant) and the file type;
 7. still computer graphic images should be presented as slides or hard copy prints. In general, time-based media should be presented on video and/or audio tape. The admissions committee can review Web pages and HTML files compatible with Netscape Navigator. Otherwise, digital video, digital audio, computer graphics animation computer files must be presented as self-running desktop presentations (Macintosh compatible) and should not require a separate application for viewing. Examples are Macromedia Director Projector files or Quicktime Movies. Students should contact the Program Office to confirm acceptability of viewing format and data storage media;
 8. the portfolio should demonstrate creative and technical potential as a multi-media designer/artist. Letter of intent and portfolio should indicate experience/skills/knowledge and interest in some of the following areas: writing, critical theory and philosophy; art direction; illustration, painting, photography, graphic design, and typography; audio editing, recording, DJ mixing, music composition, radio production; two-dimensional and three-dimensional computer graphics and animation; design and direction for theatre, film, and video production; software programming, cognitive psychology and human factors engineering for the human computer interface.
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faculty of fine arts

81.10 *PROGRAMS AND ADMISSION REQUIREMENTS*

81.20 *DEGREE REQUIREMENTS*

81.30 *FINE ARTS COURSES OF FACULTY-WIDE INTEREST*

81.40 *ART EDUCATION AND ART THERAPY*

81.50 *ART HISTORY*

81.60 *MEL HOPPENHEIM SCHOOL OF CINEMA*

81.60.4 Interdisciplinary Studies in Sexuality

81.70 *CONTEMPORARY DANCE*

81.80 *DESIGN ART*

81.90 *DIGITAL IMAGE/SOUND AND THE FINE ARTS*

81.100 *MUSIC*

81.110 *STUDIO ARTS*

81.110.1 Studio Art

81.110.2 Ceramics

81.110.3 Fibres

81.110.4 Interdisciplinary Studies

81.110.5 Painting and Drawing

81.110.6 Photography

81.110.7 Print Media

81.110.8 Sculpture

81.110.9 Women and the Fine Arts

81.120 *THEATRE*

s e c t i o n

81

Dean
CHRISTOPHER JACKSON

KATHLEEN PERRY, *Resources and Development*
ANDREA FAIRCHILD, *Academic and Student Affairs*

Associate Deans
JOHN W. LOCKE, *Space Planning*
BARBARA LAYNE, *Research and Graduate Studies*

Location	Sir George Williams Campus Visual Arts Building, Room: VA 250 (514) 848-4600																					
Objectives	During its 25 years of existence, the Faculty of Fine Arts has achieved an internationally recognized standard of excellence in undergraduate education with the visual and performing arts. The Faculty situates its students within both the pluralism of the academic experience of the University and our multicultural urban environment. At the same time, Fine Arts curriculum and teaching responds to the context and demands of a changing artistic community. Programs and courses in studio or academic disciplines within the visual and performing arts prepare students for entry into that community or for higher education in the arts.																					
Structure	The Faculty of Fine Arts has two divisions offering numerous programs. The PERFORMING ARTS DIVISION consists of the following: <table><tr><td></td><td>Calendar Section</td></tr><tr><td>Contemporary Dance</td><td>81.70</td></tr><tr><td>Music</td><td>81.100</td></tr><tr><td>Theatre</td><td>81.120</td></tr></table> The VISUAL ARTS DIVISION consists of the following: <table><tr><td>Art Education and Art Therapy</td><td>81.40</td></tr><tr><td>Art History</td><td>81.50</td></tr><tr><td>Cinema</td><td>81.60</td></tr><tr><td>Design Art</td><td>81.80</td></tr><tr><td>Digital Image/Sound and the Fine Arts</td><td>81.90</td></tr><tr><td>Studio Arts</td><td>81.110</td></tr></table>			Calendar Section	Contemporary Dance	81.70	Music	81.100	Theatre	81.120	Art Education and Art Therapy	81.40	Art History	81.50	Cinema	81.60	Design Art	81.80	Digital Image/Sound and the Fine Arts	81.90	Studio Arts	81.110
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81.10 PROGRAMS AND ADMISSION REQUIREMENTS

General admission requirements are listed in §13. Specific requirements for admission to the various programs leading to the BFA degree are set out in the first column of the following listings. They refer to the table of cégep profiles and other specific requirements defined below.

Profile	Requirements
0.00	Diploma of Collegial Studies (DEC — Diplôme d'études collégiales)
10.6	Six courses in Studio Art (course titles may vary according to cégep)
	510-122-90 Drawing from Observation
	510-232-90 Theory and Practice of Colour
	510-112-91 Visual Language I
	510-212-91 Visual Language II
	510-312-91 2-D Organization
	510-412-91 3-D Organization
	Two courses in Art History or Art Aesthetics

10.12	Mathematics 103, 105, 203
A	Interview/Audition
G	Letter of intent
K	Submission of a portfolio of representative work

Programs offered:

For information concerning any of the following programs, please consult the calendar section listed opposite each program.

Recommended Profile and Specific Requirements	Program	Calendar Section
	<i>Specializations:</i>	
10.6 or G,K	Art Education	81.40
0.00, A,G,K	Design for the Theatre	81.120
0.00, A	Drama for Human Development	81.120
0.00, A,G,K	Film Production	81.60
0.00, A,G,K	Film Studies	81.60
0.00, A	Jazz Studies	81.100
0.00, A	Music Performance Studies	81.100
0.00, A	Music Theory/Composition	81.100
0.00, A	Selected Music Studies	81.100
0.00, A	Theatre Performance	81.120
	<i>Majors:</i>	
10.6 or G,K	Art Education	81.40
0.00	Art History	81.50
10.6, G,K	Art History and Studio Art	81.50
10.6, K	Ceramics	81.110
0.00, A	Contemporary Dance	81.70
0.00, A,G,K	Design Art	81.80
10.6, 10.12, G,K	Digital Image/Sound and the Fine Arts	81.90
0.00, A	Electroacoustic Studies	81.100
10.6, K	Fibres	81.110
0.00, A,G,K	Film Animation	81.60
0.00, A,G,K	Film Production	81.60
0.00, A,G,K	Film Studies	81.60
0.00, A	Integrative Music Studies	81.100
0.00, A,G,K	Interdisciplinary Studies	81.110
10.6, G,K	Painting and Drawing	81.110
0.00, A,G,K	Photography	81.110
0.00, A,K	Playwriting	81.120
10.6, K	Print Media	81.110
10.6, K	Sculpture	81.110
10.6, G,K	Studio Art	81.110
0.00, A,G	Theatre	81.120
	<i>Minors:</i>	
0.00	Art History	81.50
10.6, G,K	Art History and Studio Art	81.50
0.00, A	Cinema	81.60
10.6, G,K	Digital Image/Sound and the Fine Arts	81.90
0.00, A	Electroacoustic Studies	81.100
0.00, A,G,K	Film Animation	81.60
0.00, A	Film Studies	81.60
0.00	Interdisciplinary Studies in Sexuality	81.60.4
0.00, A	Music	81.100
0.00, A,G,K	Photography	81.110
10.6, K	Print Media	81.110
0.00, A	Theatre	81.120
0.00, G	Women and the Fine Arts	81.110

<i>Transfer Students</i>	<p>Applicants who have completed courses in other colleges or universities may be granted credits (advanced standing) on the basis of the programs at Concordia University. These advanced standing credits will normally be awarded as general credits and as such may not be equivalent to specific first-year courses at Concordia.</p> <p>Applicants to a second undergraduate degree must complete a minimum of 60 credits, other than those credited towards the first degree, at least 36 of which must be taken in the new field of Specialization (§16.1.3). Students transferring credits towards a first degree must complete a minimum of 45 credits at Concordia (see §16.1.3).</p> <p>Students must complete all program and degree requirements, as well as the Faculty of Fine Arts residence requirements (see §81.20.2).</p>
<i>Mature Entry</i>	<p>General admission requirements to the 108-credit program (Mature Entry) are listed in §14. Students admitted into the Faculty of Fine Arts through the Mature Entry plan are required to complete 18 credits in addition to the 90 credits normally required for the BFA degree.</p>
<i>Extended Credit Program</i>	<p>Definition of the Extended Credit Program (ECP) is listed in §13.2. Students admitted to an Extended Credit Program in Fine Arts are required to complete an additional 30 credits for the degree. Advanced standing credits awarded for Ontario Academic Courses (OACs) must be applied towards the ECP portion of a student's degree program.</p>

81.20 DEGREE REQUIREMENTS

Students preparing for the BFA degree require a minimum of 90 credits. Each credit represents, for the average student, a minimum of 45 hours of work spread across lectures, conferences, tutorials, studios, rehearsals or practice periods, tests, examinations, and personal work.

81.20.1 BFA Degree Requirements

1. A candidate for the BFA degree must have qualified for admission to, and successfully completed a program of concentration in the form of a Specialization (See §16.2.3), Major (See §16.2.3) or a Double Minor* program in the Faculty of Fine Arts. A selection is made upon entry, prior to registration. The requirement of selecting a program upon entry should not be thought of as being necessarily a final commitment. Students wishing to transfer out of one degree program must satisfy the admission requirements of the program they seek to enter. Program changes are, however, subject to limitations where certain programs are in great demand. Students should be aware that to effect certain transfers they may be required to complete more than the 90 credits normally required for the degree.
*A Minor consists of an approved sequence of 24-30 credits. The term "Double Minor" refers to a combination of two minors selected from the Faculty of Fine Arts; a planned program of study in two specialized fields in Fine Arts with a lower degree of concentration in both than is afforded by a Major program.
2. A candidate for graduation must have successfully completed 12 credits selected from course offerings outside the Faculty of Fine Arts. (Normally, courses in the Department of Communication Studies do not fulfil this requirement of "outside the Faculty of Fine Arts". FRAN 373 and 374 do not fulfil this requirement of "outside the Faculty of Fine Arts".)
At the time of this Calendar going to print, the University is in the process of approving a modified General Education Requirement beginning September 2001. Newly admitted students will receive further information.
3. A candidate for graduation must have successfully completed the course FFAR 250⁶.
4. A candidate for graduation normally may apply no more than 54 credits in studio work towards the 90 credits required for the BFA degree.
5. A candidate for graduation must fulfil all university graduation requirements (See §16.2.4).
6. The credits obtained for any course may not be used to satisfy the requirements of more than one program.

81.20.2 Residence Requirements

Students are subject to the university residence requirement (see §16.1.3) which states that of the 90 credits required for the BFA degree, a minimum of 45 credits must be taken at Concordia University. Combining both residence requirements implies that the full-time student must enrol for a minimum of two years of study at Concordia University.

To fulfil the residence requirements for a BFA degree with a concentration in:

1. Art Education, Ceramics, Fibres, Painting and Drawing, Print Media, Sculpture, or Studio Art: a minimum of 30 credits in Studio Art and six credits in Art History must be completed at Concordia.

2. Art History, Art History and Studio Art, Cinema, Design Art, Film Animation, Film Production, Film Studies, Photography, Contemporary Dance, or Interdisciplinary Studies: at least half of the concentration requirements must be completed at Concordia.
3. Drama in Education, Theatre, Theatre Performance, or Design for the Theatre: Conception and Realization: a minimum of 30 credits from the Department of Theatre must be completed at Concordia.
4. Integrative Music Studies, Jazz Studies, Music Performance Studies, Music Theory/Composition, or Selected Music Studies: a minimum of 30 credits required from the Department of Music must be completed at Concordia.
5. Minor programs: at least half of the required credits must be completed at Concordia.

81.20.3
Course Load

The normal course load for students enrolled in the Faculty of Fine Arts is 30 credits per year for all full-time students, and a maximum of 18 credits per year for part-time students.

- i) Full-time students may not register for more than 18 credits of their maximum 30 credits in any studio area in any given academic year. Part-time students may not register for more than 12 credits.
- ii) Students may register for a maximum of six credits in which films are produced as a course requirement during any given academic year. See §81.60.2 for list of courses. Also, students are limited, during their degree program, to 18 credits in Film Production or 24 credits in Film Animation courses in which films are produced as a course requirement (§81.60.2).
- iii) Students may register for a maximum of six credits in Theatre Production in any given academic year, up to a maximum of 18 credits in all.
- iv) Students may register for a maximum of six credits in Music Private Study in any given academic year, up to a maximum of 18 credits in their degree program.

81.20.4
Academic
Performance
Requirements

For purposes of these regulations, “failure” includes the grades “F”, “FNS”, “R”, and “NR”. Failed students are not eligible to write supplemental examinations.

Definitions of Failed Standing

1. Failed — May Not Re-Register Without Special Permission

- a) Any student who fails courses equivalent to more than the number of credits prescribed below before obtaining the number on record specified, will be Failed. In order to re-register, such a student must obtain special permission from the Faculty Senior Academic Adviser, Student Affairs.

FAILED CREDITS More Than	BEFORE OBTAINING ON RECORD
12	30
24	60
36	90

- b) A Failed student who is given permission to re-register is placed on Academic Probation.
- c) A student placed on Academic Probation must pass the next 30 credits on the first attempt and satisfy any other conditions specified for readmission. A student failing to meet these requirements is in failed standing for a second time and will be dismissed from the University. In subsequent years, should the student wish to return to university studies, he or she must contact the Office of the Registrar for information concerning conditions and procedures for seeking readmission. Decisions of the relevant authority in the Faculty to which application is made are final.

2. Failed — May Not Re-Register

Any student who fails courses equivalent to more than the number prescribed below will be Failed and dismissed. Any Probationary Student who fails to fulfil the terms of the probation will also be Failed and may not apply for readmission. In subsequent years, should the student wish to return to university studies, he or she must contact the Office of the Registrar for information concerning conditions and procedures for seeking readmission. Decisions of the relevant authority in the Faculty to which application is made are final.

FAILED CREDITS More Than	APPLICABLE PROGRAMS
30	90-Credit and Certificate Programs
36	Mature Entry Program
42	Extended Credit Program

81.30 FINE ARTS COURSES OF FACULTY-WIDE INTEREST

Courses

The following courses provide a format in which topics of faculty-wide interest are considered:

FFAR:

FFAR 250 *The Visual and Performing Arts in Canada* (6 credits)

A lecture course surveying the current practice and theory of the visual and performing arts in Canada, with a special focus on interdisciplinary forms. The institutional, regional, and cultural traditions of the arts in Canada are discussed as contexts of contemporary developments; as well, artistic avant-gardes are related to popular cultures and the media. Invited guests and other experts in various disciplines are an essential part of the syllabus.

NOTE: Students who have received credit for FFAR 251 or 252 or IDYS 250 may not take this course for credit.

FFAR 251 *The Visual and Performing Arts in Canada I* (3 credits)

A lecture course surveying the current practice and theory of the visual and performing arts in Canada, with a special focus on interdisciplinary forms. The institutional, regional, and cultural traditions of the arts in Canada are discussed as contexts of contemporary developments; as well, artistic avant-gardes are related to popular cultures and the media. Invited guests and other experts in various disciplines are an essential part of the syllabus. This course is equivalent to the first term of FFAR 250.

NOTE: Students enrolled in a BFA program must register for FFAR 250. Students who have received credit for FFAR 250 or 252 in a previous academic year may not take this course for credit.

NOTE: Students who have received credit for IDYS 251 may not take this course for credit.

FFAR 252 *The Visual and Performing Arts in Canada II* (3 credits)

A lecture course surveying the current practice and theory of the visual and performing arts in Canada, with a special focus on interdisciplinary

forms. The institutional, regional, and cultural traditions of the arts in Canada are discussed as contexts of contemporary developments; as well, artistic avant-gardes are related to popular cultures and the media. Invited guests and other experts in various disciplines are an essential part of the syllabus. This course is equivalent to the second term of FFAR 250.

NOTE: Students enrolled in a BFA program must register for FFAR 250. Students who have received credit for FFAR 250 or 251 in a previous academic year may not take this course for credit.

NOTE: Students who have received credit for IDYS 252 may not take this course for credit.

FFAR 390 *HIV/AIDS: Cultural, Social and Scientific Aspects of the Pandemic* (6 credits)

An interdisciplinary survey of the major issues and challenges of the HIV pandemic. Such topics as the biology of the virus, therapeutic, clinical and epidemiological research developments, the social costs of sexual taboos and discrimination, and media and artistic representation by and of people with HIV are presented by faculty and visiting community experts. The epidemics in the Western hemisphere, Africa, Asia, and other regions are addressed. Learning is based on lectures, weekly tutorials, and community involvement.

FFAR 398 *Special Topics in Fine Arts* (3 credits)

A course which provides an opportunity for the study of specialized aspects of Fine Arts.

NOTE C/See §200.3

FFAR 399 *Special Topics in Fine Arts* (6 credits)

A course which provides an opportunity for the study of specialized aspects of Fine Arts.

NOTE C/See §200.3

81.40 ART EDUCATION AND ART THERAPY

Faculty	Chair, Art Education PAUL LANGDON, Associate Professor	CATHY MULLEN ROBERT J. PARKER LELAND PETERSON STEPHEN SNOW
	Director, Creative Arts Therapies DENISE TANGUAY, Assistant Professor	
	Professors Emeriti STANLEY HORNER LEAH SHERMAN	Assistant Professors RICHARD LACHAPELLE JOSÉE LECLERC CHRISTINE NOVY
	Professors ELIZABETH J. SACCÁ DAVID PARISER	Adjunct Professors IRENE GERICKE PIERRE A. GREGOIRE LOUISE LACROIX
	Associate Professors LORRIE BLAIR ANDREA FAIRCHILD	
Location	Art Education Sir George Williams Campus Visual Arts Building, Room: VA 209-1 (514) 848-4646	Creative Arts Therapies Sir George Williams Campus Visual Arts Building, Room: VA 264 (514) 848-4790
	The Art Education Department offers two teacher preparation programs that emphasize the student's development as artist, researcher, and professional. Students are expected to develop an artistic and teaching practice that connects conceptual understanding, critical reflection, and practical experience. The Major is a three-year program. In the first two years, students are introduced to the fundamentals of the field of art education. In the third year, students concentrate on professional practice and performance as community art educators in settings such as community centres, adult education programs, recreation programs, and museums. The Specialization in Art Education is a four-year program leading to teacher certification as an elementary and secondary school art specialist. The program conforms to the MEQ requirements for an extended teaching practicum and preparation in two art subjects. The number of practicum hours is determined by the MEQ and may be subject to change.	
Departmental Objectives		
Programs	Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20. The superscript indicates credit value.	
	N.B. The BFA Specialization in Art Education leads to teacher certification by the ministère de l'Éducation du Québec (MEQ). 120 BFA Specialization in Art Education 27 ARTE 220 ³ , 230 ³ , 320 ³ , 330 ³ , 340 ³ , 420 ³ , 422 ³ , 424 ³ , 434 ³ 3 Chosen from INTE 290 ³ , 291 ³ 6 EDUC 301 ³ , 305 ³ 9 ARTE 352 ³ , 354 ³ , 498 ³ 12 ARTE 423 ³ , 425 ³ 6 Chosen from ARTE 398 ³ offerings 6 FFAR 250 ⁶ 12 DRAW 200 ⁶ ; PTNG 200 ⁶ 12 Studio Art courses chosen from FBRS 240 ⁶ , 260 ⁶ ; CERA 230 ⁶ ; SCUL 200 ⁶ 6 Chosen from ARTH 370 ³ , 371 ³ , 373 ³	6 Studio Art or Art History elective credits from Group B, C or F 15 EDUC 210 ⁶ , 445 ³ , 450 ³ , 454 ³ 66 BFA Major in Art Education 21 ARTE 220 ³ , 230 ³ , 320 ³ , 330 ³ , 340 ³ , 432 ³ , 434 ³ 12 Studio Art courses chosen from CERA 230 ⁶ ; FBRS 240 ⁶ , 260 ⁶ ; SCUL 200 ⁶ ; PTNG 200 ⁶ 3 ARTE 398 ³ 6 DRAW 200 ⁶ 6 Chosen from ARTE 352 ³ , 354 ³ , 398 ³ , 498 ³ 6 Art History elective credits from Group B, C or F 6 Studio Art or Art History elective credits 6 EDUC 210 ⁶ NOTE: This program does not lead to teacher

certification. Electives permit a wider choice in courses in preparation for graduate study in areas such as art therapy, museum education, recreation, and arts administration.

81.40.1
Admission to the
Specialization and
Major in Art
Education

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Art Education.

All applicants must submit a *portfolio* of their own work, as well as a *letter of intent* as part of the admission process.

1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work.
2. Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums.
3. Individual works must be labelled including applicant's name, date, size of work, and medium(s) used.
4. Each portfolio must contain a list of contents including all the above information.
5. Works *larger than 20 x 24 inches (50 x 60 centimetres)* and three-dimensional works must be submitted in slide form.
6. Portfolios should be presented in a sturdy folder; works should be flat and unframed.
7. Out-of-town applicants may submit photographs and/or slides of their work. Return shipment of out-of-town portfolios is by prior arrangement only.

Portfolios are submitted to the Art Education Portfolio Evaluation Committee, Visual Arts Building, Room 209-1, prior to the deadline of March 15, 2001 (12:00 PM/noon).

All entering students are automatically enrolled in the Major. The Specialization is offered at the third-year and fourth-year levels. Upon completion of the second year (completion of 60 credits including ARTE 220, 230, 320, 330), students in the Major may apply for transfer to the Specialization program.

Admission to the Specialization is assessed on the basis of the applicant's suitability for school-based teaching, grades for courses completed in the first two years, a letter of intent, two references, the completion of a 70-hour internship in an elementary school (ARTE 230), and, in some cases, an interview. Students must apply to the Department by the deadline of March 1.

Academic Standing

To remain in good academic standing in the Specialization and be recommended for the Québec Art Specialist teaching permit, students must:

1. Achieve at least a "B" grade in the practicum courses ARTE 420, 423, and 425.
 - a. Students who fail any of the above courses are required to withdraw from the Specialization program.
 - b. Students who obtain a passing grade in any of the above courses that is below a "B" will be placed on conditional standing within the program and will be so informed in writing. These students will be allowed to repeat the practicum only once in order to achieve the required grade. Students who do not achieve the required grade in the repeated course will be required to withdraw from the Specialization program.
2. Maintain an overall grade average of "B-" or higher in courses of the third and fourth years. Students who do not maintain the minimum grade average during that time will be required to withdraw from the Specialization program.

Courses

Art Education:

ARTE 201 *Art in Early Childhood I*
(3 credits)

Prerequisite: Enrolment in the Specialization in Early Childhood or Major in Child Studies, or written permission of the Department of Art Education and Art Therapy. An introductory study of the art-making process in early childhood. This course is a studio workshop which investigates potential media and teaching approaches appropriate for the young child.

ARTE 202 *Art in Early Childhood II*
(3 credits)

Prerequisite: ARTE 201. A continuation of ARTE 201.

ARTE 203 *Arts in Recreation* (3 credits)

A workshop/seminar course in which students are introduced to various art forms currently used in recreation centres. Intrinsic to the course content is a consideration of the role of the arts in recreation and leisure populations.

ARTE 220 *Foundations of Art Education*
(3 credits)

A survey of content and contexts of the art education profession. In studio activities, students explore art making skills and techniques, creative expression, artistic heritage and art in society. This content is related to lesson planning for schools, museums, and community settings. Students are introduced to children's artistic development as well as basic management and

safety standards for the art classroom. Practicum experiences will include observation of children's art processes and some teaching.

NOTE: Students who have received credit for ARTE 200 may not take this course for credit.

ARTE 230 *Practicum: Observation and Analysis of Children's Learning* (3 credits)

Prerequisite: ARTE 220, or permission of the Department. This practicum course gives students first-hand experience and knowledge of children's learning as it occurs in the schools. It also provides students with a theoretical framework for observing and analysing individual and group learning processes in the art classroom. It permits students to develop preliminary skills in assessing and meeting the needs of individual children. Students are introduced to methods for evaluating learning and for critically reflecting on learning and teaching. The practicum experience consists of a placement in a primary school one day a week for a total of 70 hours.

NOTE: Students who have received credit for ARTE 200 may not take this course for credit.

ARTE 320 *Multi-Disciplinary Approaches to Art and Teaching* (3 credits)

Prerequisite: ARTE 230, or permission of the Department. This course investigates various creative, historical, and critical approaches to art as a basis for developing curriculum content. Students expand their repertoire of skills and techniques for planning and teaching lessons with multiple dimensions. Students also consider the specific requirements of students with special needs and those at different age levels. Practicum experiences will include working with children in community settings or museums or after-school day care settings.

NOTE: Students who have received credit for ARTE 300 may not take this course for credit.

ARTE 330 *Introduction to Community Art Education* (3 credits)

Prerequisite: ARTE 320, or permission of the Department. The course investigates the various issues and concerns related to community art education. Students develop skills in assessing community needs. After observation and studio research, students develop and propose an art education curriculum for a specific community setting or population. Practicum experiences will include observation of a specific population or community and team-teaching with a community educator.

NOTE: Students who have received credit for ARTE 300 may not take this course for credit.

ARTE 340 *Art Education for Adolescents and Adults* (3 credits)

Prerequisite: Second-year standing in the Major or Specialization in Art Education, or permission of the Department. Students are introduced to theories of adolescent and adult development,

and the effect these have on their behaviour and attitudes towards learning and art making. Students learn about different types of group management and support techniques appropriate for adolescent and adult students. The course presents ways to effectively integrate aspects of popular culture into curriculum planning. Practicum experiences will consist of teaching a group of adolescents and adults in a community setting.

ARTE 352 *Light-Based Media* (3 credits)

Prerequisite: Second-year standing in the Major or Specialization in Art Education, or permission of the Department. Students are introduced to light-based imaging processes such as photography and xerography. Students plan and successfully execute a lesson based on one of these processes. The course explores ways of evaluating and responding to light-based images.

NOTE: Students who have received credit for ARTE 430 may not take this course for credit.

ARTE 354 *Time-Based Media* (3 credits)

Prerequisite: Second-year standing in the Major or Specialization in Art Education, or permission of the Department. Students are introduced to time-based imaging processes such as video and multi-media installations. Students plan and successfully execute a lesson based on one of these processes. The course explores ways of evaluating and responding to time-based images.

NOTE: Students who have received credit for ARTE 430 may not take this course for credit.

ARTE 398 *Special Topics in Art Education* (3 credits)

Prerequisite: Second-year standing in the Major or Specialization in Art Education, or permission of the Department. A course which provides an opportunity for the study of specialized aspects of art education. Topics chosen for consideration vary from year to year.

ARTE 400 *Seminar and Practicum in Art Education* (6 credits)

Prerequisite: ARTE 300, enrolment in the Specialization or Major in Art Education or written permission of the Department of Art Education and Art Therapy. A seminar/practicum course in which students interrelate theory and the teaching of art to develop professional skills. Readings and supervised practicum involve the planning and implementation of a curriculum and individual sessions within the framework of an articulated philosophy of art education. *NOTE A/See \$200.3*

ARTE 420 *Art Education for Elementary School* (3 credits)

Prerequisite: ARTE 320, or permission of the Department. Students apply theories of development and learning to design appropriate lessons for elementary school practicum settings. The course explores currently available teaching resources such as textbooks, MEQ curriculum, and communication technologies. The course

also investigates processes and procedures for assessment appropriate to an elementary art classroom. A practicum of 120 hours in an elementary classroom is required in this course.

ARTE 422 *Art Education in the Secondary School I* (3 credits)

Prerequisite: Fourth-year standing in the Specialization in Art Education, or permission of the Department. A lecture/seminar course where students identify themes and concerns that are appropriate to secondary school students with diverse backgrounds. Students explore the currently available teaching resources such as MEQ curriculum and others, textbooks and communication technology.

ARTE 423 *Practicum in the Secondary School I* (3 credits)

Prerequisite: Fourth-year standing in the Specialization in Art Education, or permission of the Department. Student teachers observe and assist a secondary school art specialist in the development and implementation of an effective art program during a practicum of 120 hours. Student teachers also observe the social and cultural dynamics of the school and initiate positive interactions with their students and professional colleagues.

ARTE 424 *Art Education in the Secondary School II* (3 credits)

Prerequisite: Fourth-year standing in the Specialization in Art Education and ARTE 422, or permission of the Department. The course concentrates on the objectives, goals, and content of the *MEQ Secondary School Curriculum Guidelines* in visual arts. Students analyse, reflect, and evaluate their own practice and philosophy of art learning and teaching within the wider context of school and society.

ARTE 425 *Practicum in the Secondary School II* (9 credits)

Prerequisite: Fourth-year standing in the Specialization in Art Education and ARTE 423, or permission of the Department. This course is an extended teaching practicum in a secondary school of 300 hours. Student teachers implement curriculum planning and classroom management that respects ethnic, socio-economic, and cultural diversity, and that successfully integrates students with special needs. Student teachers also apply safe use of art materials and appropriate art learning assessment procedures.

ARTE 432 *Community Art Education: Theory and Practice* (3 credits)

Prerequisite: ARTE 330, or permission of the Department. Students connect theory and practice by planning and teaching appropriate art events for a particular community setting or population. Students investigate organizational and administrative approaches necessary for successful community art education programming.

ARTE 434 *Professional Practice for Art Educators* (3 credits)

Prerequisite: ARTE 420 or 432, or permission of the Department. Students develop, teach, and then evaluate an art program during a practicum of 60 hours in a community setting. Students formulate and express a philosophy of teaching art in a community setting that connects theory, critical thinking, reflective practice and fieldwork experience. Students investigate entrepreneurial skills needed to market community art programs. Specialization program students must complete the practicum component teaching preschool children.

ARTE 498 *Special Topics in Inter-Related Media and Technologies* (3 credits)

Prerequisite: Second-year standing in the Major or Specialization in Art Education, or permission of the Department. A course which provides an opportunity for the study of specialized aspects of art education. Topics chosen for consideration vary from year to year.

Art Therapy:

This course in Art Therapy is intended as part preparation for graduate study in this area.

ATRP 301 *An Introduction to Art Therapy* (3 credits)

Prerequisite: Second-year standing or equivalent and written permission from the Art Therapy Unit, PSYC 200 (or equivalent), Major in Art Education or 12 credits in Studio Art. Lectures, readings, and workshops which examine both the history and basic concepts of art therapy and their application.

81.50 ART HISTORY

Faculty	Chair	BRIAN FOSS																																																			
	LOREN LERNER, Associate Professor	CATHERINE MACKENZIE																																																			
	Professors	Assistant Professors																																																			
	JEAN BELISLE SANDRA PAIKOWSKY WARREN SANDERSON	ANNE DUNLOP KRISTINA HUNEALT																																																			
	Associate Professors																																																				
	JOAN ACLAND OLIVIER ASSELIN																																																				
Location	Sir George Williams Campus Visual Arts Building, Room: VA 432 (514) 848-4700																																																				
Department Objectives	<p>Art History is important for both the student scholar and the student artist. An understanding of creative and visual responses to the world throughout the history of humankind gives students valuable perspectives on both their own work and on contemporary visual culture.</p> <p>Art History is more than art appreciation. It is a lively, at times even controversial, discipline which invites investigation of the roles which intellectual, cultural, political, social, and economic factors play in defining the work of art and its subsequent reception. For this reason, students are encouraged to explore such disciplines as history, literature, philosophy, religion, women's studies and the social sciences, and are strongly advised to study languages appropriate to their interests. A program carefully structured by the student and an adviser may open up for the art history graduate a future in a variety of fields — museums, galleries and libraries, conservation, education, journalism, and research.</p> <p>The Department of Art History offers Major and Minor programs, providing students with a solid, but individualized foundation in the critical issues involved in a full understanding of the work of art. Also available are the Major and Minor programs in Art History and Studio Art which balance studio work with historical/theoretical studies.</p>																																																				
Programs	<p><i>Students are responsible for satisfying their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.</i></p> <p><i>The superscript indicates credit value.</i></p> <table> <tr> <td>66 BFA Major in Art History</td><td>6</td><td>Chosen from ARTX 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser</td></tr> <tr> <td>6 ARTH 284⁶ to be taken as first six credits in studies in Art History</td><td>24</td><td>Art History electives*</td></tr> <tr> <td>6 Chosen from Group A</td><td>18</td><td>Studio Art electives chosen from studio courses offered by the Departments of Design Art and Studio Arts</td></tr> <tr> <td>3 Group B: ARTH 360³, 361³, 362³</td><td colspan="2">*ART 460 may be substituted for six credits in Art History.</td></tr> <tr> <td>3 Group B: ARTH 363³, 364³, 365³</td><td colspan="2"></td></tr> <tr> <td>3 Group B: ARTH 366³, 367³, 368³</td><td colspan="2"></td></tr> <tr> <td>3 Group B: Art History electives</td><td colspan="2"></td></tr> <tr> <td>6 Chosen from Group C</td><td colspan="2"></td></tr> <tr> <td>6 Chosen from Group D</td><td colspan="2"></td></tr> <tr> <td>3 Chosen from Group E or Group F</td><td>30</td><td>Minor in Art History</td></tr> <tr> <td>*27 Chosen from at least three Groups in Art History, in consultation with an assigned adviser</td><td>6</td><td>ARTH 284⁶ to be taken as first six credits in studies in Art History.</td></tr> <tr> <td colspan="2">*Students may substitute credits from the Faculty of Fine Arts for up to 12 credits in Art History.</td><td>24 Art History electives chosen from at least three of the Groups in Art History, in consultation with an assigned adviser</td></tr> <tr> <td>60 BFA Major in Art History and Studio Art</td><td>30</td><td>Minor in Art History and Studio Art</td></tr> <tr> <td>6 ARTH 284⁶ to be taken as first six credits in studies in Art History</td><td>6</td><td>ARTH 284⁶ to be taken as first six credits in studies in Art History</td></tr> <tr> <td>6 Chosen from ARTH 433⁶, 434⁶ or Studio Art elective</td><td>6</td><td>ARTX 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser</td></tr> <tr> <td></td><td>6-12</td><td>Art History electives</td></tr> <tr> <td></td><td>6-12</td><td>Studio Art electives</td></tr> </table>		66 BFA Major in Art History	6	Chosen from ARTX 250 ⁶ , 260 ⁶ , 270 ⁶ or a Studio Art elective, in consultation with an adviser	6 ARTH 284 ⁶ to be taken as first six credits in studies in Art History	24	Art History electives*	6 Chosen from Group A	18	Studio Art electives chosen from studio courses offered by the Departments of Design Art and Studio Arts	3 Group B: ARTH 360 ³ , 361 ³ , 362 ³	*ART 460 may be substituted for six credits in Art History.		3 Group B: ARTH 363 ³ , 364 ³ , 365 ³			3 Group B: ARTH 366 ³ , 367 ³ , 368 ³			3 Group B: Art History electives			6 Chosen from Group C			6 Chosen from Group D			3 Chosen from Group E or Group F	30	Minor in Art History	*27 Chosen from at least three Groups in Art History, in consultation with an assigned adviser	6	ARTH 284 ⁶ to be taken as first six credits in studies in Art History.	*Students may substitute credits from the Faculty of Fine Arts for up to 12 credits in Art History.		24 Art History electives chosen from at least three of the Groups in Art History, in consultation with an assigned adviser	60 BFA Major in Art History and Studio Art	30	Minor in Art History and Studio Art	6 ARTH 284 ⁶ to be taken as first six credits in studies in Art History	6	ARTH 284 ⁶ to be taken as first six credits in studies in Art History	6 Chosen from ARTH 433 ⁶ , 434 ⁶ or Studio Art elective	6	ARTX 250 ⁶ , 260 ⁶ , 270 ⁶ or a Studio Art elective, in consultation with an adviser		6-12	Art History electives		6-12	Studio Art electives
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81.50.1
Admission to the
Major and Minor in
Art History and
Studio Art

There are no specific courses or procedures required for the Major and Minor in Art History other than the successful completion of a two-year pre-university cégep program (or equivalent). In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Art History and Studio Art. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent* as part of the admission process. In addition to recommending admission to a program, the Portfolio Evaluation Committee may recommend the completion of either ARTX 250, 260 or 270 as part of a student's program.

1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work.
2. Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums.
3. Individual works must be labelled including applicant's name, date, size of work and medium(s) used.
4. Each portfolio must contain a list of contents including all the above information.
5. Works *larger than 20 x 24 inches (50 x 60 centimetres)* and three-dimensional works must be submitted in slide form.
6. Portfolios should be presented in a sturdy folder; works should be flat and unframed.
7. Out-of-town applicants may submit photographs and/or slides of their work. Return shipment of out-of-town portfolios is by prior arrangement only.

Portfolios are submitted to the Portfolio Evaluation Committee, Visual Arts Building, Room 237, between March 7 – 20, 2001.

GROUPS:

*A – Media Based
Studies*

ARTH 261	Studies in Architecture (3 credits)	ARTH 352	Aspects of the History of Textile Art (3 credits)
ARTH 262	Studies in Drawing (3 credits)	ARTH 353	Technology and Contemporary Art (3 credits)
ARTH 263	Studies in the Print (3 credits)	ARTH 354	Gesamtkunstwerk (3 credits)
ARTH 264	History of Ceramics (3 credits)	ARTH 433	Materials and Methods in Three-Dimensional Art (6 credits)
ARTH 265	History of Sculpture (3 credits)	ARTH 434	Materials and Methods in Drawing and Painting (6 credits)
ARTH 266	History of Textile Art (3 credits)		
ARTH 349	Aspects of the History of the Print (3 credits)		
ARTH 350	Aspects of the History of Ceramics (3 credits)		
ARTH 351	Aspects of the History of Sculpture (3 credits)		

B – Period Studies

ARTH 270	Icons of Architectural History (3 credits)	ARTH 365	Aspects of Seventeenth- and Eighteenth-Century Western Art and Architecture (3 credits)
ARTH 360	Aspects of Ancient Greek Art and Architecture (3 credits)	ARTH 366	Aspects of Nineteenth-Century Western Art and Architecture (3 credits)
ARTH 361	Aspects of Ancient Roman Art and Architecture (3 credits)	ARTH 367	Aspects of Twentieth-Century Art and Architecture (3 credits)
ARTH 362	Aspects of Early Christian and Byzantine Art and Architecture (3 credits)	ARTH 368	Aspects of Contemporary Art and Architecture (3 credits)
ARTH 363	Aspects of Medieval Art and Architecture (3 credits)	ARTH 498	Special Topics in the History of Art and Architecture (3 credits)
ARTH 364	Aspects of Fifteenth- and Sixteenth-Century European Art and Architecture (3 credits)		

C – Art in Canada

ARTH 370	Aspects of Canadian Art (3 credits)	ARTH 374	Architecture and Urbanism in Montréal (3 credits)
ARTH 371	Aspects of Canadian Architecture (3 credits)	ARTH 375	Issues in the Montréal Art Milieu (3 credits)
ARTH 372	Issues in Contemporary Canadian Architecture (3 credits)	ARTH 376	Topics in Amerindian and Inuit Art (3 credits)
ARTH 373	Issues in Contemporary Canadian Art (3 credits)		

<i>D – Methodology</i>	ARTH 283	The Life and Work of ... (3 credits)	ARTH 380	Historiography and Art History (3 credits)
	ARTH 284	Methods of Art History (6 credits)	ARTH 381	Feminism and Art History (3 credits)
	ARTH 290	Art History and Archaeology (3 credits)	ARTH 388	Narration and Art (3 credits)
	ARTH 298	Special Topics in Genre Studies (3 credits)	ARTH 400	Advanced Seminar in Art Historical Method (3 credits)
	ARTH 379	Post-Colonial Theory in Art History (3 credits)		
<i>E – Theory and Criticism</i>	ARTH 383	Art and Philosophy (3 credits)	ARTH 387	Seminar in Art and Criticism (3 credits)
	ARTH 384	Theories of Representation (3 credits)	ARTH 389	Issues in Ethnocultural Art Histories (3 credits)
	ARTH 385	Colour: Theory and Application in the Visual Arts (3 credits)		
	ARTH 386	The Art Object and the Viewer (3 credits)		
<i>F – Art and Society</i>	ARTH 390	Art Institutions (3 credits)	ARTH 393	Art and Replication (3 credits)
	ARTH 391	Art and its Changing Contexts (3 credits)	ARTH 398	Special Topics in Art and Society (3 credits)
	ARTH 392	Gender Issues in Art and Art History (3 credits)		
<i>G – Tutored Studies</i>	ARTH 394	Intensive Study in Art History I (1.5 credits)	ARTH 401	Independent Studies in Art History (3 credits)
	ARTH 395	Intensive Study in Art History II (1.5 credits)		
<i>Courses</i>	ARTH 261	<i>Studies in Architecture</i> (3 credits) The role and implications of selected materials and technology in architecture.	ARTH 270	<i>Icons of Architectural History</i> (3 credits) A study of key buildings of civilization in relation to the specific vocabulary of architecture, its techniques and conditions of construction. Consideration is given as to how and why these buildings have become icons in particular societies.
	ARTH 262	<i>Studies in Drawing</i> (3 credits) Drawing as an art form and its relation to other arts. <i>NOTE A/See §200.3</i>	ARTH 283	<i>The Life and Work of ...</i> (3 credits) A critical examination of the relationship of accounts of an artist's life to an interpretation of her or his work.
	ARTH 263	<i>Studies in the Print</i> (3 credits) A selective examination of the development and uses of the print as an art form or a medium in Western and non-Western cultures. <i>NOTE A/See §200.3</i>	ARTH 284	<i>Methods of Art History</i> (6 credits) An introduction to methods used in art history to analyse and interpret works of art.
	ARTH 264	<i>History of Ceramics</i> (3 credits) A selective examination of the development and uses of ceramics as an art form or a medium in Western and non-Western traditions. <i>NOTE A/See §200.3</i>	ARTH 290	<i>Art History and Archaeology</i> (3 credits) An examination of the interrelationship between art history and archaeology as manifested in systems of classification, interpretation, periodization, stratification, as well as the valorization of series and fragments. <i>NOTE A/See §200.3</i>
	ARTH 265	<i>History of Sculpture</i> (3 credits) A selective examination of the development and uses of sculpture as an art form or a medium in Western traditions.	ARTH 298	<i>Special Topics in Genre Studies</i> (3 credits) Topics pertaining to categories of subject matter
	ARTH 266	<i>History of Textile Art</i> (3 credits) A selective examination of the development of textile art in the Western and non-Western traditions. <i>NOTE A/See §200.3</i>		

such as landscape, portraiture, and still life.
NOTE C/See §200.3

ARTH 349 *Aspects of the History of the Print* (3 credits)

An examination of selected subjects in the history of the print.

ARTH 350 *Aspects of the History of Ceramics* (3 credits)

An examination of selected subjects in the history of ceramics. *NOTE A/See §200.3*

ARTH 351 *Aspects of the History of Sculpture* (3 credits)

An examination of selected subjects in the history of sculpture.

ARTH 352 *Aspects of the History of Textile Art* (3 credits)

An examination of selected subjects in the history of textile art. *NOTE A/See §200.3*

ARTH 353 *Technology and Contemporary Art* (3 credits)

A selective examination of the dynamics of the relationship between technology and contemporary art.

ARTH 354 *Gesamtkunstwerk* (3 credits)

A selective examination of art which utilizes a number of media. The relationship to work in a single medium and historical concepts of multi-media are examined.

ARTH 360 *Aspects of Ancient Greek Art and Architecture* (3 credits)

Selected subjects examined in relation to predominant characteristics of Ancient Greek art. *NOTE A/See §200.3*

ARTH 361 *Aspects of Ancient Roman Art and Architecture* (3 credits)

Selected subjects examined in relation to predominant characteristics of Ancient Roman art. *NOTE A/See §200.3*

ARTH 362 *Aspects of Early Christian and Byzantine Art and Architecture* (3 credits)

Selected subjects examined in relation to predominant characteristics of Early Christian and Byzantine art. *NOTE A/See §200.3*

ARTH 363 *Aspects of Medieval Art and Architecture* (3 credits)

Selected subjects examined in relation to predominant characteristics of Medieval art. *NOTE A/See §200.3*

ARTH 364 *Aspects of Fifteenth- and Sixteenth-Century European Art and Architecture* (3 credits)

Selected subjects examined in relation to

predominant characteristics of fifteenth- and sixteenth-century European art.
NOTE A/See §200.3

ARTH 365 *Aspects of Seventeenth- and Eighteenth-Century Western Art and Architecture* (3 credits)

Selected subjects examined in relation to predominant characteristics of seventeenth- and eighteenth-century Western art.
NOTE A/See §200.3

ARTH 366 *Aspects of Nineteenth-Century Western Art and Architecture* (3 credits)

Selected subjects examined in relation to predominant characteristics of nineteenth-century Western art. *NOTE A/See §200.3*

ARTH 367 *Aspects of Twentieth-Century Art and Architecture* (3 credits)

Selected subjects examined in relation to predominant characteristics of twentieth-century art. *NOTE A/See §200.3*

ARTH 368 *Aspects of Contemporary Art and Architecture* (3 credits)

Selected subjects examined in relation to predominant characteristics of contemporary art. *NOTE A/See §200.3*

ARTH 370 *Aspects of Canadian Art* (3 credits)

Selected subjects examined in relation to predominant characteristics of art in Canada. *NOTE A/See §200.3*

ARTH 371 *Aspects of Canadian Architecture* (3 credits)

Selected subjects examined in relation to predominant characteristics of architecture in Canada. *NOTE A/See §200.3*

ARTH 372 *Issues in Contemporary Canadian Architecture* (3 credits)

A consideration of specific questions relevant to the current status and practice of architecture in Canada.

ARTH 373 *Issues in Contemporary Canadian Art* (3 credits)

A consideration of specific questions pertinent to contemporary art in Canada.
NOTE A/See §200.3

ARTH 374 *Architecture and Urbanism in Montréal* (3 credits)

The relationship of architecture to issues of urbanism, analysed through examples from Montréal's past and/or present.

ARTH 375 *Issues in the Montréal Art Milieu* (3 credits)

An analysis of specific artistic phenomena or events in Montréal.

ARTH 376 *Topics in Amerindian and Inuit Art* (3 credits)

A detailed examination of aspects of the art of the indigenous peoples of Canada.

ARTH 379 *Post-Colonial Theory in Art History* (3 credits)

A critical examination of the impact of colonialism upon art and art history, and of the key concepts of post-colonial art and theory.
NOTE: It is strongly recommended that students take at least six credits in Art History courses before enrolling in this course.

ARTH 380 *Historiography and Art History* (3 credits)

The history of art history as a discipline and the concepts of history it uses.
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 381 *Feminism and Art History* (3 credits)

A consideration of the effects of feminism on art history since the late 1960's.
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 383 *Art and Philosophy* (3 credits)

A consideration of the impact of Western philosophy on art theory and practice.
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 384 *Theories of Representation* (3 credits)

An examination of the different concepts of representation involved in the process of creating an art object, taking into account the relationships among image, referent, artist and audience.
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 385 *Colour: Theory and Application in the Visual Arts* (3 credits)

An examination of various theories of colour as posited by artists, philosophers, psychologists, and scientists. The relationship of such theories to the visual arts constitute an essential concern of the course.
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 386 *The Art Object and the Viewer* (3 credits)

A consideration of such questions as how a work of art addresses the viewer, what types of viewer (generic or individual) it postulates, and what theories of perception (spatial, kinaesthetic, or psychological) are involved in explaining the

process of experiencing an art object.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 387 *Seminar in Art and Criticism* (3 credits)

Prerequisite: Twelve credits in Art History, or written permission of the Department of Art History. An examination of selected aspects of the relationship between art and criticism.
NOTE A/See \$200.3

ARTH 388 *Narration and Art* (3 credits)

A critical examination of given aspects of the relationship between an image and its external references. *NOTE A/See \$200.3*
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 389 *Issues in Ethnocultural Art Histories* (3 credits)

Analyses of the conceptualization of ethnic and cultural identity in art and art history.

ARTH 390 *Art Institutions* (3 credits)

A study of selected institutions of art from a historical perspective. Consideration is given to the interrelationship of the institution and the milieu in which art is defined, made, exhibited, or purchased.
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 391 *Art and its Changing Contexts* (3 credits)

An investigation of the factors which define the initial context of a work of art and of those which modify or eclipse an original context.
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 392 *Gender Issues in Art and Art History* (3 credits)

An examination of gender as a factor in making and interpreting art.
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 393 *Art and Replication* (3 credits)

An examination of various methods of replicating art (drawing, painting, printing, casting, photographing) and their relation to the original. Special consideration is given to the effects of the "copy" on art education, aesthetics, technique, patronage, and the market.
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 394 *Intensive Study in Art History I* (1.5 credits)

Prerequisite: Written permission of the

Department of Art History. An intensive course of study designed to take advantage of the presence of a visiting scholar or the occurrence of a special event.

ARTH 395 *Intensive Study in Art History II* (1.5 credits)

Prerequisite: Written permission of the Department of Art History. An intensive course of study designed to take advantage of the presence of a visiting scholar or the occurrence of a special event. *NOTE C/See §200.3*

ARTH 398 *Special Topics in Art and Society* (3 credits)

Prerequisite: Twelve credits in Art History, or written permission of the Department of Art History. A course designed to permit a detailed examination of some aspects of art in society. *NOTE C/See §200.3*

ARTH 400 *Advanced Seminar in Art Historical Method* (3 credits)

Prerequisite: Third-year* standing in the Major in Art History. A seminar designed to permit an in-depth examination of some aspects of methodology relevant to art history. *NOTE A/See §200.3*
**fewer than 33 credits remaining in degree program.*

ARTH 401 *Independent Studies in Art History* (3 credits)

Prerequisite: Third-year* standing in the Major in Art History, and written permission of the Department of Art History. Students are required to prepare a research paper under the supervision of a faculty member. *NOTE A/See §200.3*
**fewer than 33 credits remaining in degree program.*

ARTH 433 *Materials and Methods in Three-Dimensional Art* (6 credits)

Through a series of lectures, practical

demonstrations, and special projects in three-dimensional art, this course familiarizes the student with selected historical and contemporary principles, processes, and materials of concern to the artist.

NOTE A/See §200.3

NOTE: Credits for this course may not be applied towards fulfilling art history requirements in the programs in Art Education, Ceramics, Design Art, Fibres, Painting and Drawing, Photography, Print Media, Sculpture, Studio Art.
NOTE: Students who have received credit for ARTH 268 may not take this course for credit.

ARTH 434 *Materials and Methods in Drawing and Painting* (6 credits)

Prerequisite: Enrolment in the Major/Minor in Art History or the Major in Art History and Studio Art, or written permission of the Department of Art History. Through a series of lectures, practical demonstrations, and special projects in the media of drawing and painting, this course familiarizes the student with some of the historical materials, techniques, and other aspects of the artist's concern.

NOTE: Credits for this course may not be applied towards fulfilling art history requirements in the programs in Art Education, Ceramics, Design Art, Fibres, Painting and Drawing, Photography, Print Media, Sculpture, Studio Art.
NOTE: Students who have received credit for ARTH 267 or ARTH 234 or ART 420 may not take this course for credit.

ARTH 498 *Special Topics in the History of Art and Architecture* (3 credits)

Prerequisite: Eighteen credits in Art History, or written permission of the Department of Art History. A course for advanced students which provides for the study of more specialized areas of art. *NOTE A/See §200.3*

81.60 MEL HOPPENHEIM SCHOOL OF CINEMA

Faculty	Chair THOMAS WAUGH, Professor	LOUISE LAMARRE MARTIN LEFEBVRE MARJORIE MORTON MARIELLE NITOSLAWSKA PETER RIST CATHERINE RUSSELL
	Professors MARIO FALSETTO JOHN LOCKE CAROLE ZUCKER	Assistant Professors JEAN-CLAUDE BUSTROS ROSANNA MAULE CILIA SAWADOGO DON TERRY
	Associate Professors STEFAN ANASTASIU CHRISTOPHER HINTON RICHARD KERR	
Location	Sir George Williams Campus Faubourg Tower, Room: FB 319 (514) 848-4666	
Department Objectives	Education in Cinema is the mission of the School. This implies an ongoing effort to maintain the highest standards for the curriculum, faculty, staff, facilities, and services on the undergraduate and graduate levels. It also implies that there must be an effort to create an optimal learning environment for students who not only attend lectures but also make films and study completed films as central components of their education at Concordia. Recognizing the complexity of the assignments given to students, faculty and staff expertise and accessibility become crucial. Conjointly, the continuing faculty research, which both enriches the education of the students and contributes to the field of cinema, has to be given a place of importance. Successfully balancing the desire to provide individual and small group instruction to a large number of highly motivated students with the need to provide the time required for faculty research is a priority for the School. All aspects of the School's mission are to be carried out with respect for humanistic values, justice, and human rights.	
Programs	<p>Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with \$81.20. The superscript indicates credit value.</p> <div> <div> <p>66 BFA Specialization in Film Production <i>NOTE: It is strongly recommended that students in the Specialization in Film Production have, or acquire, a knowledge of French.</i></p> <p>*12 FMST 211⁶, 212⁶ 18 FMPR 231⁶, 332⁶, 432⁶ 12 FMPR 338³, 339³, 340³, 450³ 9 Chosen from FMPR 334³, 335³, 341³, 343³, 350³, 398³, 435³, 438³, 439³, 440³, 441³, 442³, 498³ 9 Film Studies electives** (excluding FMST 200) 6 Cinema electives** **** or credits outside of Cinema selected in consultation with the head of Film Production</p> <p>66 BFA Specialization in Film Studies <i>NOTE: It is strongly recommended that students in the Specialization in Film Studies have, or acquire, a knowledge of French.</i></p> <p>*24 FMST 211⁶, 212⁶, 321⁶, 322⁶</p> </div> <div> <p>6 Chosen from FMST 214³, 215³, 418³, 419^{3***} 6 FMPR 231⁶ or Cinema electives**** approved by the head of Film Studies 3 FMST 450³ 21 Film Studies electives** (excluding FMST 200); FMPR 334³, 341³, 441³ 6 Film Studies seminar credits chosen in consultation with an adviser</p> <p>54 BFA Major in Film Production *12 FMST 211⁶, 212⁶ 21 FMPR 231⁶, 332⁶, 338³, 339³, 340³ 6 Film Studies elective(s)** (excluding FMST 200) 15 Cinema electives** ****</p> <p>54 BFA Major in Film Animation 12 FMAN 202⁶, 214⁶ 6 FMAN 212³, FMST 323³ 12 FMAN 303⁹, 326³; or FMAN 304⁹, 319³ 9 FMAN 315³, 324⁶ 9 FMAN 402⁹ 6 Film Studies electives****</p> </div> </div>	

- 48 BFA Major in Film Studies**
 *24 FMST 211⁶, 212⁶, 321⁶, 322⁶
 18 Film Studies electives** (excluding FMST 200)
 6 Cinema electives** ****
- 30 Minor in Cinema**
 12 FMST 211⁶, 212⁶
 18 Film Studies electives** (With the written permission of the School, introductory-level Film Animation or Film Production courses, selected in consultation with the School, may be substituted.)
This is a very limited enrolment program for students who want to have some access to Film Production and Film Animation courses.
This Minor cannot be combined with the Minor in Film Animation or the Minor in Film Studies to form a Double Minor program.
- 30 Minor in Film Animation**
 15 FMAN 202⁶, 303⁹
 6 FMAN 214⁶
 6 FMAN 212³, FMST 323³
 3 Cinema electives
This Minor cannot be combined with the Minor in Cinema or the Minor in Film Studies to form a Double Minor program.
- 24 Minor in Film Studies**
 12 Chosen from FMST 200⁶, 211⁶, 212⁶
 12 Film Studies electives**
This Minor cannot be combined with a second Faculty of Fine Arts Minor to form a BFA Double Minor program. It is primarily intended for

students outside the Faculty of Fine Arts. Students in Communication Studies Department degree programs must have written permission of their Department to enter this program.

NOTES:

*FMST 211 and 212 should be taken as part of the first 30 credits.

**In the Major and Specialization in Film Production, and the Major and Specialization in Film Studies, up to 12 credits chosen from the following courses in the Faculty of Arts and Science may be applied as Film Studies or Cinema electives for degree purposes: Communication Studies listed in §81.60.3; Français 373, 374. In the Minor in Cinema and the Minor in Film Studies, up to six credits chosen from the following courses in the Faculty of Arts and Science may be applied as Film Studies elective(s) for degree purposes: Communication Studies listed in §81.60.3; Français 373, 374.

***Communication Studies 303 may be substituted for three credits in Film Studies and must be considered as Film Studies credits for degree purposes.

****In the Specialization in Film Production, the Specialization in Film Studies, and all Cinema Major programs, the following courses may be applied as Cinema electives for degree purposes: VDEO 300, VDEO 350.

Minor in Interdisciplinary Studies in Sexuality

See §81.60.4

**81.60.1
Admission to Cinema
Programs**

The Mel Hoppenheim School of Cinema has distinct admission procedures in addition to the normal admission process of Concordia University. While all applicants are required to submit a *portfolio* and a *letter of intent*, an *interview* may also be required depending upon the Cinema concentration chosen.

In order to allow themselves sufficient preparatory time, applicants are strongly encouraged to contact the School in January for detailed information regarding these requirements as well as for submission deadline dates.

NOTE: The Specialization in Film Production is offered at the third-year level. Upon attainment of third-year standing (33 or fewer credits remaining to be completed in the program), students in the Major in Film Production may apply for transfer to the Specialization in Film Production.

Courses

Film Studies:

NOTE: Courses may occasionally be offered in French.

FMST 200 Introduction to Film Studies
(6 credits)

A survey acquainting the student with the art of the film. The technical and critical terminology of film studies is discussed. Popular literature on film, such as reviews, is analysed and the more specialized film literature is introduced. Directors whose films are usually viewed include Bergman, Eisenstein, Fellini, Ford, Hitchcock, Kurosawa, Lubitsch, Keaton, and Welles. Weekly screenings.
NOTE A/See §200.3

FMST 211* History of Film to 1959
(6 credits)

The evolution of the forms and themes of world

cinema from its origin to 1959, in relation to its cultural, social, and political contexts. Special emphasis is placed on film historical methodology, focusing on approaches based on genre, auteur, national cinemas, social history, particular cinematic modes, or other frameworks. Weekly screenings. *NOTE A/See §200.3*

*Students in Cinema programs who require FMST 211 should complete the course as part of their first 30 credits.

FMST 211* L'histoire du cinéma jusqu'à 1959 (6 crédits)

Ce cours couvre l'évolution des formes et des thématiques cinématographiques depuis leur début jusqu'à 1959 et les place dans leur contexte culturel, social et politique. L'accent est mis principalement sur la méthodologie de l'histoire du cinéma tout en privilégiant plusieurs

angles d'approche: genre, cinéma d'auteur, cinéma national, histoire sociale, forme cinématographique particulière ou d'autres grilles. Visionnements hebdomadaires.

NOTE A/Voir §200.3

**Si ce cours figure au programme d'une personne inscrite en Cinéma, il devrait faire partie des 30 premiers crédits.*

FMST 212* Film Aesthetics (6 credits)

A study of the aesthetics of film. Topics include film criticism, theories about the fundamental elements of film, and comparisons between films which do not depend on their date of production. Problems of film description, interpretation, and evaluation are discussed. Weekly screenings. *NOTE A/See §200.3*

**Students in Cinema programs who require FMST 212 should complete the course as part of their first 30 credits.*

FMST 214 English-Canadian Film
(3 credits)

A survey of English-Canadian film from the earliest surviving works to the present. Topics include fictional, documentary, animated, and experimental film, and the role of the National Film Board is discussed. Weekly screenings.

NOTE A/See §200.3

FMST 215 Le cinéma québécois (3 crédits)

Tour d'horizon du cinéma québécois mettant l'accent sur des œuvres contemporaines. Les films sont examinés en fonction de leur valeur culturelle et politique. On y traite également de la structure de l'industrie du cinéma au Québec et du rôle joué, entre autres, par l'Office national du film. Visionnements hebdomadaires.

NOTE A/Voir §200.3

NOTE: Ce cours peut, à l'occasion, être offert en anglais. / Course may occasionally be taught in English.

FMST 217 First Nations and Film
(3 credits)

A survey of representation by and of aboriginal peoples in film and video. The emphasis is on the Americas, but important works from other continents are included. Films and videotapes, both mainstream and experimental, are discussed in the context of contemporary aesthetic issues, socio-cultural history, and post-colonial theory. Weekly screenings.

NOTE: Students who have received credit for FMST 398H may not take this course for credit.

FMST 311 Montage Aesthetic (3 credits)

Prerequisite: FMST 212. An intensive study of montage as an element of film style. Beginning with the work of D.W. Griffith, developments in film editing are followed through French Avant-Garde and Russian films of the 1920s to contemporary film. Weekly screenings.

FMST 312 Moving Camera Aesthetic
(3 credits)

Prerequisite: FMST 212. An intensive study of camera movement as an element of film style.

Consideration is given to relations between long takes, deep-focus cinematography, and camera movement, as well as to the role of camera movement in creating the signification of film. Films by Murnau, Renoir, Welles, Ophuls, and Snow are included among those viewed and discussed. Weekly screenings.

FMST 313 Film Comedy I (3 credits)

Prerequisite: Second-year standing.* An introduction to film comedy in the silent and sound eras. The visual and verbal sources of comedy are analysed through the study of films ranging from Mack Sennett and Buster Keaton to Woody Allen and Jacques Tati. Weekly screenings.

**66 or fewer credits remaining in degree program.*

FMST 318 Experimental Film (3 credits)

Prerequisite: Second-year standing.* An examination of experimental film emphasizing developments from the late forties to the present. The New American Cinema is considered in relation to other North American and European experimental cinemas, and examples of the historical antecedents of recent experimental films are viewed and discussed. Weekly screenings.

**66 or fewer credits remaining in degree program.*

FMST 321 Studies in Film Directors
(6 credits)

Prerequisite: FMST 211 or second-year standing*. A concentrated study of the work of several major directors, principally narrative, from different periods in film history. Each director's work is examined in detail with representative films from distinct periods. The films are considered in terms of thematic and stylistic consistency and variation as well as biographical, social, and political factors. Weekly screenings.

NOTE A/See §200.3

**66 or fewer credits remaining in degree program.*

FMST 322 History of Film since 1959
(6 credits)

Prerequisite: FMST 211 or second-year standing*. A cross-cultural historical examination of selected aspects of world cinema since 1959, including trends in documentary and experimental film. The principal focus on European and American cinema is contextualized through reference to Canadian, Japanese, and Third World film. A range of perspectives is introduced, including genre and auteur study, formal analysis, and feminist analysis. Films are studied in their political and cultural contexts. Weekly screenings.

NOTE A/See §200.3

**66 or fewer credits remaining in degree program.*

FMST 323 History of Animated Film
(3 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation, or second-year standing*. A survey of animated film from the first decade of the twentieth century to the present. Styles of animation ranging from abstract experimental film of the

1920s, to the Disney Studio, to computer animation are viewed and discussed. The contribution of the National Film Board of Canada and particularly that of Norman McLaren is considered. Weekly screenings.
NOTE A/See §200.3
**66 or fewer credits remaining in degree program.*

FMST 324 *Film Script Analysis* (3 credits)
 Prerequisite: Second-year standing* and six credits in Film Studies. A study of the film script both as a basis for the construction of a film and as an identifiable component of film with its own history and value. Examples from film history as well as the work of major scriptwriters are analysed in their written form and through film screenings. The stages of script development from story idea through shooting script are discussed.
**66 or fewer credits remaining in degree program.*

FMST 325 *Film Acting* (3 credits)
 Prerequisite: Second-year standing.* A study of film acting centred on examining performances and individual scenes from films. Among the issues studied are the creation of star personas, casting against type, the influence of the script in the performance, the use of improvisation, the gesture system in silent film acting, ensemble acting, stylization, and exaggeration. Weekly screenings. *NOTE A/See §200.3*
**66 or fewer credits remaining in degree program.*

FMST 327 *Third World Film* (3 credits)
 Prerequisite: Second-year standing.* A survey of Third World films seen in relation to their cultural, political, and aesthetic environment. Films are selected from areas such as Latin America, the Caribbean, Africa, the Middle East, South and East Asia. Weekly screenings.
**66 or fewer credits remaining in degree program.*

FMST 328 *Non-fiction Film Since 1956* (3 credits)
 Prerequisite: Second-year standing*. A cross-cultural survey of contemporary developments in the documentary film. The course begins with the precursors of *cinéma-direct* in North America and Europe during the fifties, and extends through the most recent applications of *cinéma-direct* in the emerging cinemas of the Third World. Emphasis is placed on both the artistic achievement and the theoretical, cultural, and political context of the non-fiction film during this period of technological and aesthetic transition. Weekly screenings.
**66 or fewer credits remaining in degree program.*

FMST 329 *Women and Film* (3 credits)
 Prerequisite: FMST 211 or second-year standing*. An examination of films made by women, film criticism written by women, and the portrayal of women in films. These topics are considered within the context of film history and with an emphasis on their relation to ideas in contemporary feminist theory. Weekly screenings.
NOTE A/See §200.3
**66 or fewer credits remaining in degree program.*

FMST 332 *Issues in Independent Cinema* (3 credits)
 Prerequisite: FMST 211 or second-year standing*. An intensive study of selected tendencies in cinema produced outside the mainstream of the film industry. Topics may include documentary, video art, experimental or narrative film, or particular convergences of these modes of film practice. Topics will vary according to the instructor's specialization.
NOTE A/See §200.3
**66 or fewer credits remaining in degree program.*
NOTE: Students who have received credit for FMST 331 may not take this course for credit without permission from the School.

FMST 335 *Aspects of National Cinemas* (3 credits)
 Prerequisite: Second-year standing.* An examination of films as reflections of national cultures. Films by a range of directors representing one or several national groupings such as Japan, Brazil, Eastern Europe, Great Britain, or contemporary West Germany are discussed in the context of their aesthetic, cultural, and political aspirations. Weekly screenings.
NOTE A/See §200.3
**66 or fewer credits remaining in degree program.*

FMST 337 *Topics in American Cinema* (3 credits)
 Prerequisite: Second-year standing.* A lecture or seminar course which provides an opportunity for the study of limited and more specialized aspects of U.S. cinema. Topics may include individual genres, directors, production studios, historical periods, or aspects of independent cinema. Topics vary from year to year according to the instructor's field of specialization.
**66 or fewer credits remaining in degree program.*

FMST 350 *Studies in Film Genres* (3 credits)
 Prerequisite: Second-year standing*; FMST 211 or 322. An intensive analysis of one or two film genres, which assumes previous experience in film-genre studies. The genre is discussed in terms of its structural characteristics and the ways in which it is a product of specific social situations. Weekly screenings.
**66 or fewer credits remaining in degree program.*

FMST 391 *Sexual Representation in Cinema* (3 credits)
 Prerequisite: Second-year standing* or six credits in the Minor in Interdisciplinary Studies in Sexuality. An investigation of cinematic sexual imagery as art, communication and socio-cultural phenomenon. Weekly screenings of films and videos, representing fiction, experimental and documentary genres, as well as different historical and cultural contexts, are related to theoretical readings, both classical and contemporary, by authors from Freud and the Surrealists to Foucault and recent feminist and queer theorists. Contemporary issues such as pornography, autobiography, and the HIV epidemic are con-

fronted. Learning is interdisciplinary, interactive and group-oriented.

**66 or fewer credits remaining in degree program.*

NOTE: Students who have received credit for this topic under an FMST 498 number may not take this course for credit.

FMST 392 Representation and Sexuality: Queer Cinema I (3 credits)

An interdisciplinary, cross-cultural survey of queer cinema and video. Selected phases in the historical trajectory of lesbian and gay film are highlighted, both underground and mainstream, including studies of representative major artists from Jean Cocteau and Dorothy Arzner to Patricia Rozema and Derek Jarman. Problems in the depiction of sexual minorities are analysed, and a selection of the principal aesthetic, theoretical and socio-political issues raised by queer theory and cultural production is introduced. *NOTE A/See §200.3*

FMST 393 Representation and Sexuality: Queer Cinema II (3 credits)

Prerequisite: FMST 392. An extension of FMST 392. An in-depth focus on selected historical, aesthetic, and theoretical issues, which vary from year to year according to the expertise of faculty. *NOTE A/See §200.3*

FMST 398 Special Topics in Film Studies (3 credits)

Prerequisite: Written permission of the School of Cinema. A course which provides an opportunity for the study of limited and more specialized aspects of film studies. *NOTE C/See §200.3*

FMST 399 Special Topics in Film Studies (6 credits)

Prerequisite: Written permission of the School of Cinema. A course which provides an opportunity for the study of specialized aspects of film studies outside the scope of existing courses. *NOTE C/See §200.3*

FMST 409 Seminar in Women and Film (3 credits)

Prerequisite: Written permission of the School of Cinema. An advanced course in the study of films made by women, as well as of the representation of women in films. The topics selected for study may vary from year to year and are considered within the context of film history, contemporary feminist philosophy, and feminist film theory. Students are expected to conduct independent research for class presentation. *NOTE A/See §200.3*

FMST 414 Seminar in Film Directors (3 credits)

Prerequisite: Eighteen credits in Film Studies and written permission of the School of Cinema. A seminar for advanced students which provides for more concentrated study of the work of specific film directors. The director or directors whose films are chosen for study varies from year to year according to the instructor's field of specialization. *NOTE C/See §200.3*

FMST 416 Seminar in Film History (3 credits)

Prerequisite: Eighteen credits in Film Studies and written permission of the School of Cinema. A seminar for advanced students which provides for the study of limited and more specialized areas of film history. The areas chosen for study vary from year to year according to the instructor's field of specialization. *NOTE C/See §200.3*

FMST 418 Seminar in English-Canadian Film (3 credits)

Prerequisite: FMST 214 or COMS 316, and written permission of the School of Cinema. A seminar in which selected aspects of English-Canadian film are examined and discussed. The areas chosen for study vary from year to year according to the instructor's field of specialization.

FMST 419 Séminaire sur le cinéma québécois (3 crédits)

Préalable: FMST 215 ou COMS 316, ainsi que permission écrite de l'École de cinéma. Un séminaire dans lequel des aspects sélectifs du cinéma québécois sont analysés et discutés. Les sujets d'étude choisis varient d'année en année selon la spécialisation de l'instructeur.

FMST 422 Seminar in Film Theory and Criticism (3 credits)

Prerequisite: FMST 212 and written permission of the School of Cinema. Theories including those of Sergei Eisenstein and André Bazin are studied both as explanations of the effects of films and as foundations for film criticism. The relation of contemporary theoretical writings, such as those in film semiology, to film criticism is discussed. Weekly screenings.

FMST 423 Seminar in Comparative Stylistic and Formal Analysis (3 credits)

Prerequisite: Written permission of the School of Cinema. An intensive course in the analysis of film style. Films are examined using an analytical projector in order to discover their formal and thematic structures. The contribution of cinematographers, editors, scriptwriters, directors, and performers to the development of a style are discussed. Weekly screenings.

FMST 424 Seminar in Film Narrative (3 credits)

Prerequisite: Written permission of the School of Cinema. An examination of conventions of film narrative from a theoretical and historical point of view. Innovations in narrative structure are discussed and consideration is given to the origin, development, and transformation of narrative traditions in their cultural and aesthetic context.

FMST 425 Seminar in Contemporary Film Theory (3 credits)

Prerequisite: Written permission of the School of Cinema. A survey and analysis of major recent

theoretical approaches to film. Among the topics discussed are auteurism, semiotics, textual analysis, ideological criticism, psychoanalysis, feminism, and neo-formalism. The seminar includes screenings, discussions of weekly readings, and oral presentations by the students.
NOTE A/See §200.3

FMST 426 Professional Internship I
(3 credits)

Prerequisite: Second-year standing* in the Major in Film Studies or the Specialization in Film Studies; written permission of the School of Cinema. A Film Studies student who has been commissioned to work in such areas as film research, archival work, editing film publications, or writing film criticism, may seek permission to apply three credits towards the Film Studies degree program. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member. *NOTE A/See §200.3*

*66 or fewer credits remaining in degree program.

FMST 427 Professional Internship II
(3 credits)

Prerequisite: Second-year standing* in the Major in Film Studies or the Specialization in Film Studies; written permission of the School of Cinema. A student repeating FMST 426 registers for credit under FMST 427. *NOTE A/See §200.3*

*66 or fewer credits remaining in degree program.

FMST 428 Independent Study I (3 credits)

Prerequisite: Written permission of the School of Cinema. A course of independent study in which the student may explore a specific area of film studies.

FMST 429 Independent Studies II
(3 credits)

Prerequisite: Written permission of the School of Cinema. A student repeating FMST 428 registers for credit under FMST 429 provided the subject matter is different.

FMST 450 Film Studies Specialization Seminar (3 credits)

Prerequisite: Second-year standing* in the Specialization in Film Studies; written permission of the School of Cinema. This intensive seminar includes workshops in research methodology, in advanced study and career planning, and in the practice of criticism, publication, preservation, and programming. The relation of film studies to filmmaking practice, the role of changing technology, and the current cultural context of the discipline are discussed by visiting experts from both within the University and the community at large. The course brings together all students in the Specialization in Film Studies.

*66 or fewer credits remaining in degree program

FMST 498 Special Topics in Film Studies
(3 credits)

Prerequisite: Written permission of the School of Cinema. A lecture or seminar course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film studies.

NOTE A,C/See §200.3

Film Animation:

NOTE: A student may register for only one course in which films are produced as a course requirement during each academic session. See §81.60.2

FMAN 202 Animation I (6 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation; or written permission of the School of Cinema, with either FMPR 231 or six credits in a Studio Art course. A studio course introducing the study and practice of film animation. Students will be taught the fundamentals of motion analysis and frame-by-frame filmmaking, basic character animation, camera layouts, exposure sheets and character design. *NOTE A/See §200.3*

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

FMAN 212 Animation Aesthetics
(3 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation; or written permission of the School of Cinema. Film Studies for Animation students: an introduction to the theory and aesthetics of film animation.

FMAN 214 Technical Aspects of Film Animation (6 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation; written permission of the School of Cinema. An intensive hands-on seminar/workshop in which principles and techniques of photographic and motion picture arts are applied to animation filmmaking. Students will be introduced to cameras (photographic processes), filmstocks, editing equipment, sound synchronization, the rotoscope and the optical printer.

NOTE A/See §200.3

FMAN 303 Animation II: Classical
(9 credits)

Prerequisite: Second-year standing* in the Major in Film Animation or in the Minor in Film Animation; FMAN 202; written permission of the School of Cinema. A continuation on a more advanced level of FMAN 202. In a continued introduction to filmmaking, students will learn narrative structure and sound conception in film. *NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.*

NOTE: Students who have received credit for

FMAN 302 or 313 may not take this course for credit.
**66 or fewer credits remaining in degree program.*

FMAN 304 *Animation II: Digital* (9 credits)
Prerequisite: Second-year standing* in the Major in Film Animation; FMAN 202; written permission of the School of Cinema. An introduction to computer-assisted animation.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

NOTE: Students who have received credit for FMAN 302 or 313 may not take this course for credit.

**66 or fewer credits remaining in degree program.*

FMAN 315 *From Idea to Storyboard*
(3 credits)

Prerequisite: FMAN 303 or 304 previously or concurrently and written permission of the School of Cinema. Exploration of the visual development of ideas and scripts in a storyboard form. Students participate in creative and experimental exercises which include timing, planning the sound track, and filming the storyboards.

FMAN 319 *Character Animation* (3 credits)

Prerequisite: FMAN 202 previously or concurrently and written permission of the School of Cinema. An examination of the fundamentals of character animation, its theory, techniques, and application to studio situations. Exercises in character design and dramatization are directed towards the students' particular interests and style. *NOTE A/See §200.3*

NOTE: Previous drawing experience is recommended.

FMAN 324 *Drawing for Animation*
(6 credits)

Prerequisite: FMAN 202; enrolment in the Major in Film Animation; written permission of the School of Cinema. An intensive studio course exploring the design and construction of "characters" for animation. The concept of "drawing" is extended into various media including computers.

FMAN 326 *Computer Animation*
(3 credits)

Prerequisite: FMAN 303 previously or concurrently and written permission of the School of Cinema. A studio course in aspects of 3D computer-generated animation and graphics, covering the fundamentals of image generation and motion analysis. *NOTE A/See §200.3*

NOTE: Students who have received credit for this course as a special topics offering may not take this course for credit.

FMAN 352 *3-Dimensional Animation*
(3 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation; FMAN 202; written permission of the School of Cinema. An intensive hands-on seminar/work-

shop in the art and craft of 3-D animation production. This course is designed to acquaint the student with photographic techniques, model and set construction, materials, motion control, and lighting, as it applies to animation film-making. Recent developments and a study of international styles and techniques are included. *NOTE: Students who have received credit for FMAN 498H may not take this course for credit.*

FMAN 398 *Special Topics in Film Animation* (3 credits)

Prerequisite: Written permission of the School of Cinema. An opportunity for study of limited and more specialized aspects of film animation.

NOTE C/See §200.3

NOTE: Students are required to bear the cost of materials.

FMAN 402 *Animation III* (9 credits)

Prerequisite: Third-year standing* in the Major in Film Animation; FMAN 212; FMAN 303 or 304; FMAN 324; FMST 323. A continuation on a more advanced level of Animation II, where students work independently on a major film animation project. *NOTE A/See §200.3*

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

**33 or fewer credits remaining in degree program.*

FMAN 446 *Professional Internship I*
(3 credits)

Prerequisite: Second-year standing* in the Major in Film Animation; written permission of the School of Cinema. A Film Animation student who will be employed within the film industry during the same calendar year may seek permission to apply three credits towards the Film Animation degree program. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member. *NOTE A/See §200.3.*

**66 or fewer credits remaining in degree program.*

FMAN 447 *Professional Internship II*
(3 credits)

Prerequisite: Second-year standing* in the Major in Film Animation; written permission of the School of Cinema. A student repeating FMAN 446 registers for credit under FMAN 447. *NOTE A/See §200.3.*

**66 or fewer credits remaining in degree program.*

FMAN 448 *Independent Study I* (3 credits)

Prerequisite: Written permission of the School of Cinema. A course of independent study in which the student explores a specific area of film animation. *NOTE A,C/See §200.3*

FMAN 449 *Independent Study II* (3 credits)

Prerequisite: Written permission of the School of Cinema. A student repeating FMAN 448 registers

for credit under FMAN 449 provided the subject matter is different. *NOTE A/See §200.3*

FMAN 498 *Special Topics in Film Animation* (3 credits)

Prerequisite: Written permission of the School of Cinema. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film animation. *NOTE A,C/See §200.3*

Film Production:

NOTE: A student may register for only one course in which films are produced as a course requirement during each academic session. See §81.60.2.

FMPR 231 *Filmmaking I* (6 credits)

Prerequisite: Enrolment in a Cinema program; FMST 211 or 212 previously or concurrently; written permission of the School of Cinema. A comprehensive course introducing students to the art of making films. This course stresses the individual student's creative efforts in filmmaking. Students are expected to master basic technique and theory. Students will also be using digital post-production systems to edit their works. The course requires attendance at mandatory workshops outside of class time. *NOTE A/See §200.3*
NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

FMPR 332 *Filmmaking II* (6 credits)

Prerequisite: Second-year standing* in the Major in Film Production; FMPR 231; FMPR 338 and 340 concurrently; written permission of the School of Cinema. An intermediate course in the theory, practice and technique of filmmaking. The course emphasizes idea development, creative process, methods of production, and production planning. Projects are made with a crew or individually, using film and/or digital technology, and digital post-production software. *NOTE A/See §200.3*
NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

*NOTE: Students who have received credit for FMPR 331 may not take this course for credit. *66 or fewer credits remaining in degree program.*

FMPR 334 *Problems and Methods of Film Production and Distribution* (3 credits)

Prerequisite: FMPR 231. Topics include organizing a film project, financial aspects of film production and distribution, legal problems, film laboratory procedures, and post-production operations. Digital applications used in budgeting and scheduling film projects are also explored. *NOTE A/See §200.3*

FMPR 335 *Acting and Directing Acting for the Screen I* (3 credits)

Prerequisite: Written permission of the School of Cinema; FMPR 332 previously or concurrently,

or six credits in Theatre Performance. This studio course for Cinema and Theatre students explores directing and performing for film; exercises are recorded on video for analysis. Both performers and directors examine acting and directing acting for the camera through such topics as role preparation, character development, and performance continuity. *NOTE A/See §200.3*

FMPR 338 *Image I* (3 credits)

Prerequisite: Enrolment in the Major in Film Production; FMPR 231; FMPR 332 and 340 previously or concurrently; written permission of the School of Cinema. This is a comprehensive course about the equipment and technologies available to the contemporary filmmaker. Traditional technical aspects of filmmaking remain fundamental in this course, while digital technologies are also explored. Students learn about different cameras, image formats, lenses, lighting and grip equipment, film stocks, electronic image support systems and laboratory procedures. Students must attend compulsory workshops in addition to classes.

NOTE: Students who have received credit for FMPR 342 may not take this course for credit.

FMPR 339 *Montage I* (3 credits)

Prerequisite: Enrolment in the Major in Film Production; FMPR 231; FMPR 332, 338 and 340 previously or concurrently; written permission of the School of Cinema. An introduction to methods, approaches and techniques of editing used by editors working in various genres of film — drama, documentary, experimental. Editing image, sound and preparation and supervision or re-recording are included. Analog and digital post-production platforms will be included. Attendance is required at mandatory laboratory sessions outside of class time. *NOTE A/See §200.3*

FMPR 340 *Sound I* (3 credits)

Prerequisite: Enrolment in the Major in Film Production; FMPR 231; FMPR 332 and 338 concurrently; written permission of the School of Cinema. An introductory course in the aesthetics of sound and music design, and the techniques of location and studio recording and post-production. Analog and digital platforms and technologies will be included. Weekly mandatory laboratory sessions.

NOTE: Students who have received credit for FMPR 242 may not take this course for credit.

FMPR 341 *Writing for Film I* (3 credits)

Prerequisite: FMPR 231 and written permission of the School of Cinema. An introduction to writing for film, with special emphasis on the relation of the script to filmmaking. Students are expected to submit work of their own for discussion, analysis, and possible production in filmmaking courses. Students will also use special computer software to write scripts. *NOTE A/See §200.3*

FMPR 343 *Production Design* (3 credits)
Prerequisite: Second-year standing* in Film Production, Film Animation, or Theatre Department programs and written permission of the School of Cinema. A practical examination of the visual aspects of film production. Topics in production design considered may include texture and visual styles, the collaborative process, project management, and the nature of constraints which apply to student and independent productions.
NOTE A/See §200.3
**66 or fewer credits remaining in degree program.*

FMPR 350 *Ways of Seeing in Film Production* (3 credits)
Prerequisite: Enrolment in the Major in Film Production or the Specialization in Film Production; written permission of the School of Cinema. A forum of ideas intended to increase the student's awareness of cinema as a visual medium. Aspects of our visual culture are presented and discussed: work by painters, photographers, sculptors, architects, and artists working with digital media. A relationship is made between the work of such artists and the work of the filmmaker. Students work on individual visual projects. *NOTE A/See 200.3*
NOTE: Students who have received credit for FMPR 498F may not take this course for credit.

FMPR 361 *Documentary Approaches in Film Production* (3 credits)
Prerequisite: Written permission of the School of Cinema. This course deals with aesthetic and conceptual issues surrounding the subject of documentary as a form. All issues in the production of a documentary film are treated, including budget, production, and post-production, and the changes brought by new technologies. This course will also analyse the shift in production away from film to digital technologies, in the field of the documentary.
NOTE: Students who have received credit for this topic under an FMPR 498 number may not take this course for credit.

FMPR 398 *Special Topics in Film Production* (3 credits)
Prerequisite: Written permission of the School of Cinema. A course which provides an opportunity for the study of specialized aspects of film production outside the scope of existing courses.
NOTE C/See §200.3

FMPR 399 *Special Topics in Film Production* (6 credits)
Prerequisite: Written permission of the School of Cinema. A course which provides an opportunity for the study of specialized aspects of film production outside the scope of existing courses.
NOTE C/See §200.3

FMPR 432 *Filmmaking III* (6 credits)
Prerequisite: Third-year standing* in the Specialization in Film Production or the Major in Film Production; FMPR 332, 338, 340; written permission of the School of Cinema. A progression of

FMPR 332, with students working on more advanced filmmaking projects. Students will edit projects using digital technologies. The development of concepts introduced in FMPR 332 is continued. *NOTE A/See §200.3*
NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.
NOTE: Students who have received credit for FMPR 431 may not take this course for credit.
**33 or fewer credits remaining in degree program.*

FMPR 435 *Acting and Directing Acting for the Screen II* (3 credits)
Prerequisite: FMPR 335 and written permission of the School of Cinema. A continuation of FMPR 335 on a more advanced level.

FMPR 438 *Image II* (3 credits)
Prerequisite: Enrolment in the Specialization in Film Production or the Major in Film Production; FMPR 332, 338, 340; FMPR 339 previously or concurrently; written permission of the School of Cinema. Building on the technical knowledge acquired in Image I, this course focuses on the art of cinematography. Advanced lighting and camera techniques are treated, emphasizing their aesthetic function. Students in this course will have mastered basic technical concerns, and are expected to develop interesting visual approaches for films made in Filmmaking III. Exercises are shot on film, digital and 35mm stills. Film excerpts and rushes are analysed from a cinematographer's point of view.

FMPR 439 *Montage II* (3 credits)
Prerequisite: FMPR 339 and written permission of the School of Cinema. A continuation of FMPR 339. This course is taught utilizing digital post-production editing systems.

FMPR 440 *Sound II* (3 credits)
Prerequisite: Enrolment in the Specialization in Film Production or the Major in Film Production; FMPR 338, 340; written permission of the School of Cinema. The central focus of the course is the creative designing of the soundtrack. The course emphasizes the interaction between sound and image in film and includes both individual and collective sound projects. This course is also taught on digital sound post-production platforms, and stresses the use of digital editing systems.

FMPR 441 *Writing for Film II* (3 credits)
Prerequisite: FMPR 341 and written permission of the School of Cinema. A continuation of FMPR 341 on a more advanced level. Students will also use special computer software to write scripts.

FMPR 442 *Optical Printer Practice* (3 credits)
Prerequisite: FMPR 338 previously or concurrently, or FMAN 314; written permission of the School of Cinema. A film production course assisting students in the understanding and application of advanced optical printer technology and aesthetics. *NOTE A/See §200.3*

FMPR 445 Professional Internship
(6 credits)

Prerequisite: Second-year standing* in the Specialization in Film Production or the Major in Cinema, Option A, Film Production; and written permission of the School of Cinema. A Film Production student who will be employed within the film industry during the same calendar year may seek permission to apply six credits towards the Film Production degree program. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member. *NOTE A/See 200.3*

*66 or fewer credits remaining in degree program.

FMPR 446 Professional Internship I
(3 credits)

Prerequisite: Enrolment in the Major in Cinema, Option A, Film Production or in the Specialization in Film Production; and written permission of the School of Cinema. A Film Production student who will be employed within the film industry during the same calendar year may seek permission to apply three credits towards the Film Production degree program. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member. *NOTE A/See 200.3*

FMPR 447 Professional Internship II
(3 credits)

Prerequisite: Written permission of the School of Cinema. A student repeating FMPR 446 for credit registers under FMPR 447.
NOTE A/See 200.3

FMPR 448 Independent Study I (3 credits)

Prerequisite: Written permission of the School of Cinema. A course of independent study in which the student explores a specific area of film production.
NOTE A,C/See 200.3

FMPR 449 Independent Study II (3 credits)

Prerequisite: Written permission of the School of Cinema. A student repeating FMPR 448

registers for credit under FMPR 449 provided the subject matter is different.

NOTE A/See 200.3

FMPR 450 Film Production Specialization Seminar (3 credits)

Prerequisite: Enrolment in the Specialization in Film Production and written permission of the School of Cinema. A seminar offering in-depth, practical approaches to artistic and technical situations. This course brings together all students in the Specialization in Film Production.

FMPR 451 Advanced Project Internship I
(3 credits)

Prerequisite: Enrolment in the Specialization in Film Production or the Major in Film Production; FMPR 332 previously or concurrently; written permission of the School of Cinema. A Film Production student who contributes in a key position to a graduate project in the Film Production MFA program may apply for credits on the understanding that the application take place prior to the production and is authorized by the faculty members responsible for both programs.

FMPR 452 Advanced Project Internship II
(3 credits)

Prerequisite: FMPR 451 and written permission of the School of Cinema. A student repeating FMPR 451 for credit registers under FMPR 452.

FMPR 458 Independent Study (6 credits)

Prerequisite: Written permission of the School of Cinema. A course of independent study in which the student explores a specific area of Film Production.

FMPR 498 Special Topics in Film Production (3 credits)

Prerequisite: Written permission of the School of Cinema. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film production.
NOTE A,C/See 200.3

FMPR 499 Special Topics in Film Production (6 credits)

Prerequisite: Written permission of the School of Cinema. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film production.
NOTE A,C/See 200.3

81.60.2
Filmmaking

Courses in which films are produced as a course requirement are:

FMAN 202⁶, 303⁹, 304⁹, 402⁹
FMPR 231⁶, 332⁶, 432⁶

81.60.3
Communication
Studies Film Courses

NOTE: For course descriptions see §31.070.

Students enrolled in the Film Studies or Film Production Major or Specialization programs may select up to 12 credits from the Communication Studies courses listed below. Students enrolled in the Minor in Cinema and the Minor in Film Studies may select up to six credits from the Communication Studies courses listed below.

The credits earned may be applied as Film Studies and/or Cinema electives for degree purposes.

COMS 301	Selected Topics in National Cinemas (3 credits)
COMS 302	Selected Topics in Film Genres (3 credits)
COMS 303	Selected Topics in Canadian Cinemas (3 credits)
COMS 304	Selected Topics in Film Studies (3 credits)
COMS 306	Documentary Film (3 credits)
COMS 416	Film Criticism (3 credits)
COMS 417	Film Ideas (3 credits)
COMS 434	Advanced Topics in Film Studies (3 credits)

81.60.4 INTERDISCIPLINARY STUDIES IN SEXUALITY

81.60.4
Interdisciplinary
Studies in Sexuality

Coordinator until June 30, 2001
FRANCES M. SHAVER, Associate Professor,
Sociology and Anthropology

Coordinating Committee
BRIAN FOSS, Associate Professor, Art History
MARCIE FRANK, Associate Professor, English
ROSEMARY HALE, Associate Professor, Religion
EDWARD LITTLE, Associate Professor, Theatre
CATHERINE MAVRIKAKIS, Associate Professor,
Études françaises

CHANTAL NADEAU, Associate Professor,
Communication Studies
KAT O'BRIEN, Associate Professor, Design Art
DIANA PEDERSEN, Associate Professor, History
JAMES G. PFAUS, Associate Professor,
Psychology
LILLIAN ROBINSON, Principal, Simone de
Beauvoir Institute
THOMAS WAUGH, Professor, Mel Hoppenheim
School of Cinema, and Coordinator of the Minor
as of July 1, 2001

Program

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.
The superscript indicates credit value.

27 Minor in Interdisciplinary Studies in Sexuality

- 12 Chosen from FASS 391/INTE 391³, FASS 392/INTE 392³; SOCI 375/ANTH 375^{3*}; FMST 392³; INTE 390/FFAR 390⁶.
- 9 Elective credits on sexuality and sexual orientation chosen in consultation with the program coordinator from periodic topics courses and other suitable courses identified in a given year, and from the following regular courses:
AHSC 253³; ENGL 445³; FMST 391^{3*}; RELI 380³; WSDB 383³.
- 6 Chosen each year from courses in gender and women's studies in consultation with the program coordinator from a list of available offerings within departments of the Faculties of Fine Arts and Arts and Science.

**Prerequisites waived for students having completed six credits in the Minor in Interdisciplinary Studies in Sexuality.*

Courses

FASS:

FASS 391 (also listed as INTE 391) **Issues in Sexuality Research** (3 credits)

An interdisciplinary survey of approaches to research in sexuality within the humanities, the arts, and the social sciences. Basic concepts of sexual identity, values, conduct, representation, and politics are addressed through such topical concerns as pornography and censorship, and through the perennial dialogue between biological and socio-cultural models of sexuality. The relation between theories and research methods is discussed in the context of classical and current

research and creative activity. The syllabus reflects the varying specializations of the instructors from year to year.

FASS 392 (also listed as INTE 392) **Introduction to Queer Theory** (3 credits)

An interdisciplinary survey of the basic post-1970 theories of sexual minorities and diversity, in their historical and cultural contexts. Authors from Michel Foucault to Eve Kosofsky Sedgwick are introduced, as well as the work of artists and performers from Derek Jarman to k.d. lang. The syllabus reflects the varying specializations of the instructors from year to year.

81.70 CONTEMPORARY DANCE

Faculty	<p><i>Acting Chair</i> MICHAEL MONTANARO, Assistant Professor</p> <p><i>Associate Professor</i> SILVY PANET-RAYMOND</p>
Location	<p><i>Loyola Campus</i> TJ Building, Room: TJ 307 (514) 848-4740</p>
Department Objectives	<p>The Contemporary Dance Department offers comprehensive training which combines formal dance training with extensive studies in choreography. Encouraging students to discover and develop their individual creative capacities as both dancers and choreographers is the mission of the Dance program.</p> <p>Performance is a crucial element in this development, and students at Concordia gain valuable experience performing or staging their own choreographies.</p>
Program	<p><i>Students are responsible for satisfying their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.</i></p> <p><i>The superscript indicates credit value.</i></p> <p>60 BFA Major in Contemporary Dance</p> <p>18 Dance 200⁶, 300⁶, 400⁶</p> <p>12 Chosen from Dance 210⁶, 310⁶, 330⁶, 410⁶</p> <p>12 Dance 320⁶, 420⁶</p> <p>3 Dance 211³</p> <p>6 Dance 230⁶</p> <p>3 Theatre Performance 201³</p> <p>6 ARTX or other Studio Art elective or Department of Theatre elective, selected in consultation with an adviser.</p>
81.70.1 Admission to Contemporary Dance	<p>There is a distinct procedure for admission to the Major in Contemporary Dance in addition to the normal admission process of Concordia University. All applicants to Contemporary Dance are required to attend an <i>audition</i> as part of the admission process.</p> <p>Applicants should preferably contact the Department of Contemporary Dance before March 1, 2001 to arrange their audition and for detailed information regarding admission to Dance. For late auditions in August, contact the Department preferably by June 29.</p>
Courses	<p>DANC 200 Workshop in Dance I (6 credits) Prerequisite: DANC 210, previously or concurrently, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. Studies of the creative process in dance, emphasizing movement exploration in relation to form and content. Various approaches to dance are introduced and personal and group research is developed. Consideration is given to visual, verbal, and acoustic elements in dance. Studio: four hours per week. Laboratory: two hours per week. <i>NOTE A/See §200.3</i></p> <p>DANC 210 Body Movement I (6 credits) Prerequisite: Enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. The technical development of suppleness, strength, coordination, and kinetic awareness is emphasized. Body movement is discussed and developed as preparation for dance. Studio: six hours per week.</p> <p>DANC 211 Dance Traditions (3 credits) A survey of the history of dance, including relations between older dance traditions and styles of modern dance. Lecture course.</p> <p>DANC 230 Sound and Silence for the Dancer (6 credits) Prerequisite: Enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. The basics of music theory through guided analytical text using singing, single line score reading and moving, including the study of rhythm, melody, harmony, tempi, dynamics, tone colour, and musical forms with emphasis on the fundamental understanding of rhythm, melody, and harmony physically and mentally.</p>

DANC 240* Principles of Contemporary Dance (6 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. A survey of technical skills, improvisation, and dance composition. Studio: four hours per week. Laboratory: two hours per week.

**Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their degree program.*

DANC 261 Summer Workshop in Dance I (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. Sequences of studio sessions which may include body movement, improvisation, performance technique, and choreography. Studio: four hours per week. Laboratory: two hours per week.

NOTE: Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their program requirements.

DANC 262 Summer Workshop in Dance II (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. A continuation of DANC 261. Studio: four hours per week. Laboratory: two hours per week.

NOTE: Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their program requirements.

DANC 300 Workshop in Dance II (6 credits)

Prerequisite: DANC 200, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. A continuation of DANC 200. Studio: four hours per week. Laboratory: two hours per week.

DANC 310 Body Movement II (6 credits)

Prerequisite: DANC 210 or DANC 330, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. A continuation of DANC 210. Studio: six hours per week.

DANC 320 Choreography I (6 credits)

Prerequisite: DANC 300, previously or concurrently, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. The organization of movement, space, and time into dance performances. The process of choreographic creation is followed through stages of originating the idea, developing the theme and structure, rehearsing, and performing. Students' works are performed. Studio: four hours per week. Practice laboratory: two hours per week. Rehearsal: four hours per week.

DANC 330 Principles of Anatomy and Body Movement (6 credits)

Prerequisite: DANC 210, and written permission

of the Department of Contemporary Dance. A workshop of movement fundamentals based on the practical understanding of anatomy and dance technique. Studio: six hours per week.

DANC 398 Special Topics in Dance (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. Topics vary from year to year, taking into account the special aptitudes of instructors and students. Studio: six hours. *NOTE C/See \$200.3*

DANC 400 Workshop in Dance III (6 credits)

Prerequisite: DANC 300, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. A workshop that provides opportunities for the extension of creative potential, improvement of performance abilities, and development of methodologies in research, using movement and other related art forms. Studio: four hours per week. Laboratory: two hours per week.

DANC 410 Body Movement III (6 credits)

Prerequisite: DANC 310 or 330 previously and DANC 400, previously or concurrently, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. A continuation of DANC 310. Studio: six hours per week.

DANC 420 Choreography II (6 credits)

Prerequisite: DANC 320, and enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. A continuation of DANC 320. Studio: four hours per week. Practice laboratory: two hours per week. Rehearsal: four hours per week.

DANC 441 Independent Study I (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. A course of independent study in which the student explores a specific area of contemporary dance. *NOTE A/See \$200.3*

DANC 442 Independent Study II (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. A student repeating DANC 441 registers for credit under DANC 442. *NOTE A/See \$200.3*

DANC 499 Topics in Dance (6 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. Advanced choreography where movement shares equal emphasis with all other arts developed into multi-media theatre. Studio: four hours per week. Practice laboratory: two hours per week. Rehearsal: four hours per week.

81.80

DESIGN ART

Faculty	<p><i>Chair</i> LYDIA SHARMAN, <i>Associate Professor</i></p> <p><i>Associate Professors</i> GREGORY P. GARVEY KAT O'BRIEN</p> <p><i>Assistant Professors</i> P. KAREN LANGSHAW MICHAEL LONGFORD MARTIN RACINE</p>
Location	<p><i>Sir George Williams Campus</i> Visual Arts Building, Room: VA 244 (514) 848-4626</p>
Department Objectives	<p>The Department of Design Art offers a three-year undergraduate program providing a broad foundation for a multi-faceted discipline. The program emphasizes the interdependence of design, fine arts, humanities, and sciences. Personal creative expression and aesthetic sensibility are balanced with an understanding of the cultural impact, social applications, and ethical responsibilities of the design artist.</p> <p>Students study design history, theory, and practice, and are introduced to contemporary issues and innovative developments. In both the theoretical and practical components of the program, the curriculum emphasizes creative experimentation, imaginative risk-taking, and collaborative practices. Students undertake experimental and applied projects in both two- and three-dimensional design, site-specific installations, and digital media. The learning of computer skills and the acquisition of the language of digital technologies are an essential aspect of all courses in the Design Art program. Students are encouraged to develop their intellectual curiosity and a keen sense of critical analysis through research and rational inquiry, and to utilize their powers of both written and verbal expression.</p>
Program	<p><i>Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.</i></p> <p><i>The superscript indicates credit value.</i></p> <p>72 BFA Major in Design Art</p> <p>30 DART 200⁶, 210⁶, 300⁶, 310⁶, 400⁶</p> <p>6-12 DART 422⁶, 423⁶</p> <p>0-6 DART 410⁶, 424⁶, 425⁶, 440⁶, 470⁶, 471³, 499⁶</p> <p>6 DRAW 200⁶</p> <p>6 Studio Art* elective chosen in consultation with an adviser</p> <p>6 Chosen from ARTX 250⁶, 260⁶, 270⁶ or a Studio Art elective outside the Department of Design Art</p> <p>6 DART 260⁶</p> <p>6 Art History electives or Art 261⁶</p> <p><i>*Chosen from the Departments of Design Art or Studio Arts.</i></p>
81.80.1 Admission to the Major in Design Art	<p>In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Design Art.</p> <p>All applicants must submit a <i>portfolio</i> as part of the admission process.</p> <ol style="list-style-type: none"> 1. Portfolios should consist of a maximum of 20 examples of the applicant's own work. 2. Portfolios should consist of two-dimensional, three-dimensional, time-based fine art studio and applied design work in a wide range of media. 3. The portfolio should demonstrate the applicant's creative potential as a designer/artist. Included work should represent an ability in two- and three-dimensional projects in fine arts, applied design, and computer-assisted design. For example: painting, sculpture, graphic and product design, theatre design, studio and technical drawing, photography, video and digital media. 4. Individual works must be labelled including applicant's name, date, size of work, and medium(s) used. 5. Each portfolio must contain a list of contents including all the above information. 6. Works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form.

7. Portfolios should be presented in a sturdy folder; works should be flat, unframed, and well-presented.
8. Out-of-town applicants may submit photographs, slides, videos and/or CD's of their work.
In addition:
9. A *letter of intent* written in either English or French must be submitted to the Department office by the applicants when arranging an interview appointment. The letter must state the reason for applying to the Design Art program and the ways in which the applicant's education background, work experience, and general interests can act as a preparation for the Design Art program.
10. Applicants are required to submit a copy of their transcript with their portfolio.
11. Portfolios must be submitted to the Department office, VA 244, by March 7, 2001. Students may also be called to attend an interview.

Courses

NOTE: Students are required to bear the cost of materials in Studio Art courses.

DART 200 *Design Art Theory and Practice* (6 credits)

Prerequisite: Enrolment in the Major in Design Art or written permission of the Department of Design Art. In this course, students are introduced to design art concepts and methods. Content focuses on design fundamentals and innovation in two- and three-dimensional design, and digital media. This course emphasizes the integration of digital technologies in design art practice.

Design Art. A consideration of design theory and practice, with emphasis on the inter-relationship of stylistic, socio-cultural, and technical aspects. Examples are drawn from a broad spectrum of epochs and geographical areas, but particular attention is given to historical approaches that have importance for contemporary design. Students will complete their major research project using digital imaging and page layout software.

DART 202 *Design in the Arts I* (3 credits)

Prerequisite: Written permission of the Department of Design Art. This course is not open to Design Art students unless they require 108 or 120 credits. A foundation course in the elements and principles of design for all Fine Arts students with concentrations outside of Design Art. The focus is on process rather than product creation in this theoretical and practical preparation for design problems in the student's area of concentration.

DART 300 *Individual Projects in Design Art (Analysis and Application)* (6 credits)

Prerequisite: DART 200 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. Individual projects involving experimentation, innovation, and problem-solving in design art are completed and analysed in terms of their application to the assigned objectives. Students build on the digital design skills, which include advanced 3D modelling and rendering software.

DART 203 *Design in the Arts II* (3 credits)

Prerequisite: DART 202; written permission of the Department of Design Art. This course is not open to Design Art students unless they require 108 or 120 credits. This course develops the study of elements and principles of design art begun in DART 202 for Fine Arts students with concentrations outside Design Art.

DART 310 *Collaborative Projects in Design Art (Research Coordination)* (6 credits)

Prerequisite: DART 200, 210; DART 300, previously or concurrently, and either enrolment in the Major in Design Art or written permission of the Department of Design Art. Problem-solving in design art. Collaborative projects involving experimentation and innovation are completed and analysed in terms of their application to the assigned objectives. Team research and coordination are major requirements of this course. *NOTE A/See §200.3*

DART 210 *Introduction to Research Methodology in Design Art* (6 credits)

Prerequisite: Enrolment in the Major in Design Art or written permission of the Department of Design Art. A project-based study providing basic experiences in research methodology. The content of this course focuses on the relationship of the individual to the social, economic and cultural implications of design, and introduces the interdependence of design, fine arts, humanities and sciences. *NOTE A/See §200.3*

DART 398 *Special Topics in Design Art* (3 credits)

Prerequisite: Second-year standing* in the Major in Design Art or written permission of the Department of Design Art. This course provides an opportunity for the study of special issues in design art. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. **66 or fewer credits remaining in degree program.*

DART 260 *The History of Design: Theory and Practice* (6 credits)

Prerequisite: Enrolment in the Major in Design Art or written permission of the Department of

DART 399 *Special Topics in Design Art* (6 credits)

Prerequisite: Second-year standing* in the

Major in Design Art or written permission of the Department of Design Art. This course provides an opportunity for the study of special issues in design art. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. **66 or fewer credits remaining in degree program.*

DART 400 *Design Art Seminar* (6 credits)

Prerequisite: DART 300, 310, and either enrolment in the Major in Design Art or written permission of the Department of Design Art. A theory course involving discussion and lectures, in addition to workshops and field trips outside of course time. Standards and theories of design, both past and present, are discussed. Student seminar presentations are required. *NOTE A/See §200.3*

DART 410 *Design for Interactive New Media* (6 credits)

Prerequisite: DART 300 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. This project-based course explores the ways in which information is organized, manipulated, and disseminated in the context of new information technologies. Topics for investigation include new opportunities in new media authoring and Web site design; animation, sound, and digital video; and interactive interface design.

DART 422 *Experimental Design: Image* (6 credits)

Prerequisite: DART 300 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. A design studio in which innovative concepts, techniques, and tools of image-making are investigated and developed. Students develop a body of work that combines traditional and digital media in the expression of their image-making. Students learn to align the language of their media in the content, direction, and dissemination of their work through all stages of the design process, from ideation through to production.

DART 423 *Experimental Design: Object* (6 credits)

Prerequisite: DART 300 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. A design studio in which innovative concepts, techniques, and tools of object-making are investigated and developed. *NOTE A/See §200.3*

DART 424 *Applied Design: Image* (6 credits)

Prerequisite: DART 300 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. A design studio course in which individual student projects, based upon social and environmental issues, address the use of image in the marketplace. A range of practices employed in contemporary image-making is investigated. The course

focuses on graphic design and typography in digital publishing systems for print media. Topics for investigation include the role and responsibility of the designer, image ethics, photography, advertising, media jamming and alternative media. Students are asked to consider notions of community, audience, and the role of the designer in the social and political dimension of our everyday lives.

DART 425 *Applied Design: Object* (6 credits)

Prerequisite: DART 300 and either enrolment in the Major in Design Art or written permission of the Department of Design Art. A design studio course in which individual student projects, based upon social and environmental issues, address the use of object in the marketplace. Students are taught advanced 3D modelling and rendering software.

DART 440 *Independent Study* (6 credits)

Prerequisite: Written permission of the Department of Design Art. Independent study in which the student explores a special area of design art. *NOTE A/See §200.3*

DART 470 *Professional Internship* (6 credits)

Prerequisite: Third-year standing* in the Major in Design Art and written permission of the Department of Design Art. This option is for students wishing to undertake research and obtain practical experience for academic credit as an intern with an established artist/designer, studio, publication, publishing house, museum, corporation, or non-profit organization. Other related options for internship will also be considered. The internship is carried out under the joint supervision of a qualified professional from within the University or the organization involved and a full-time faculty member. A clearly defined agreement between the Department, the student and the artist/designer or institution involved is made before the internship is undertaken. This agreement states clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate an appropriate academic experience for the student.

**33 or fewer credits remaining in degree program.*

DART 471 *Professional Internship* (3 credits)

Prerequisite: Third-year standing* in the Major in Design Art and written permission of the Department of Design Art. Three-credit internship, as described in DART 470, for one semester only.

**33 or fewer credits remaining in degree program.*

DART 498 *Special Topics in Design Art* (3 credits)

Prerequisite: Second-year standing* in the Major in Design Art or written permission of the

Department of Design Art. A course for advanced students which provides an opportunity for the study of special issues in design art. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.
**66 or fewer credits remaining in degree program.*

DART 499 *Special Topics in Design Art*
(6 credits)

Prerequisite: Second-year standing* in the Major in Design Art or written permission of the Department of Design Art. A course for advanced students which provides an opportunity for the study of special issues in design art. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.
**66 or fewer credits remaining in degree program.*

81.90 **DIGITAL IMAGE/SOUND AND THE FINE ARTS**

<i>Faculty</i>	<i>Coordinator</i> YVES BILODEAU
<i>Location</i>	<i>Sir George Williams Campus</i> Visual Arts Building, Room: VA 250 (514) 848-4600 http://digital.concordia.ca
<i>Program Objective</i>	The Faculty of Fine Arts offers a Major and a Minor in Digital Image/Sound and the Fine Arts. The Major program complements a new Computer Science Option in Computer Applications. These two programs allow computer scientists to study particular fine arts disciplines, and artists to cross over into the more scientific realm of computer science. The Major and the Minor programs in Digital Image/Sound and the Fine Arts provide students with a knowledge and understanding of digital media concepts, and authoring and scripting for the design of interactive multi-media.
<i>Programs</i>	<p>45 Major in Digital Image/Sound and the Fine Arts</p> <p>6 FFAR 250⁶</p> <p>6 DFAR 350⁶</p> <p>6 DFAR 450⁶</p> <p>12-15 Chosen from DART 200⁶; EAMT 205⁶; FMAN 304⁹; IDYS 200⁶; PHOT 200⁶; or one of the ARTX courses</p> <p>12-15 Chosen from Design Art; Film Animation; Interdisciplinary Studies; Music; and Photography in consultation with an adviser and according to a recommended list of courses</p> <p>30 Minor in Digital Image/Sound and the Fine Arts</p> <p>6 FFAR 250⁶</p> <p>6 DFAR 350⁶</p> <p>6-12 Chosen from DART 200⁶; EAMT 205⁶; FMAN 304⁹; IDYS 200⁶; PHOT 200⁶; or one of the ARTX courses</p> <p>6-12 Chosen from DFAR 450⁶; Design Art; Film Animation; Interdisciplinary Studies; Music; and Photography in consultation with an adviser and according to a recommended list of courses</p>
<i>81.90.1 Admission Requirements</i>	<p>This program is limited to students who are enrolled in or simultaneously applying for the Computer Science Option in Computer Applications. In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Digital Image/Sound and the Fine Arts. All applicants must submit to the Program Office, Visual Arts Building, Room 257, between March 7 – 20, 2001:</p> <ol style="list-style-type: none"> 1. a <i>letter of intent</i>; 2. a copy of their most recent transcript; 3. a <i>portfolio</i> consisting of written, two-dimensional, three-dimensional and time-based work; 4. include excerpts of typed writing samples, two-dimensional work; 10–20 slides; and/or video, maximum 10 minutes (VHS, HI-8mm or 8mm only); and/or a sound tape (analog or DAT), maximum 10 minutes; and/or CD-ROM, KODAK Photo-CD, data cartridge (Syquest, ZIP) or diskette (must be Macintosh compatible); and/or URL reference to a Web site; 5. two-dimensional works larger than 20 x 24 inches (50 x 60 centimetres) and three-dimensional works must be submitted in slide form; 6. individual works must be labelled including applicant's name, date, size of work, and medium(s) used. Applicants should indicate clearly what is to be reviewed. In the case of computer files, applicants must list precisely the directory/folder or pathname which contains the file(s); the complete file name(s) with extension (if relevant) and the file type; 7. still computer graphic images should be presented as slides or hard copy prints. In general, time-based media should be presented on video and/or audio tape. The admissions committee can review Web pages and HTML files compatible with Netscape Navigator. Otherwise, digital video, digital audio, computer graphics animation computer files must be presented as self-running desktop presentations (Macintosh compatible) and should not require a separate application for viewing. Examples are Macromedia Director Projector files or Quicktime Movies.

Students should contact the Program Office to confirm acceptability of viewing format and data storage media;

8. the portfolio should demonstrate creative and technical potential as a multi-media designer/artist. Letter of intent and portfolio should indicate experience/skills/knowledge and interest in some of the following areas: writing, critical theory and philosophy; art direction; illustration, painting, photography, graphic design, and typography; audio editing, recording, DJ mixing, music composition, radio production; two-dimensional and three-dimensional computer graphics and animation; design and direction for theatre, film, and video production; software programming, cognitive psychology and human factors engineering for the human computer interface; and
9. applicants must fulfil the admission requirements for the Computer Science Option in Computer Applications (see §71.10.2) and be accepted into the Computer Applications Option.

<i>Courses</i>	<p>DFAR 350 <i>Multi-Media Authoring in the Fine Arts</i> (6 credits)</p> <p>Prerequisite: Second-year standing* in the Major or Minor in Digital Image/Sound and the Fine Arts, or written permission of the coordinator of the program. This course is an in-depth introduction to digital media concepts, authoring and scripting for the design of interactive multi-media. Course topics include: 1) digital media representation, characteristics, and limitations for graphics, audio, animation and video; 2) perceptual and aesthetic aspects of digital media; 3) compression schemes and standards; 4) tools and techniques of image and audio processing; and 5) authoring, scripting, and programming environments and applications. Students complete individual and group projects requiring computer laboratory use. These projects may involve CD-ROM production and working with the World Wide Web. Software applications may include Macromedia Director and Lingo, MAX, Pro Tools, Adobe Premiere, HTML and JAVA.</p> <p><i>*66 or fewer credits remaining in degree program.</i></p>	<p>DFAR 450 <i>Advanced Workshop: Theory and Practice in Digital Image/Sound</i> (6 credits)</p> <p>Prerequisite: Third-year standing* in the Major in Digital Image/Sound and the Fine Arts; DFAR 350; or written permission of the coordinator. This course is a practice-oriented studio/seminar. Students pursue self-defined studio projects based on their interest and experience, and centred on the use of the computers in Fine Arts disciplines. Complementing the individual's production would be a series of lectures and readings/discussions exploring the current theoretical and critical literature of the field. The material would of necessity be cross-disciplinary in nature.</p> <p><i>*33 or fewer credits remaining in degree program.</i></p>
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81.100 MUSIC

Faculty	<p><i>Chair</i> MARK CORWIN, <i>Associate Professor</i></p> <p><i>Associate Professors</i> LISELYN ADAMS KEVIN AUSTIN JERI BROWN ALLAN CROSSMAN</p> <p>ROD ELLIAS CHARLES ELLISON ANDREW HOMZY CHRISTOPHER JACKSON</p> <p><i>Assistant Professor</i> ROSEMARY MOUNTAIN</p>		
Location	<p><i>Loyola Campus</i> Refectory Building, Room: RF 326 (514) 848-4705</p>		
Department Objectives	<p>The Mission of the Department of Music is to develop musicians, to support musical activities through teaching, research and performances, and to foster the appreciation of the value of music and fine arts in society.</p> <p>The Department is committed to the development of musicians through options and opportunities found within the multi-disciplinary context of the Faculty of Fine Arts through generalized and specialized education.</p> <p>Areas of study include theory, history, instrumental and vocal studies, including ensembles and private study, composition, jazz, electroacoustics/recording, and music technology.</p> <p>Academic scholarship, research, and creativity enhance faculty members' teaching which furthers the Department's involvement in national and international artistic and scholarly communities.</p>		
Programs	<p><i>Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20.</i> <i>The superscript indicates credit value.</i></p> <p>SPECIALIZATION IN MUSIC</p> <p>The Faculty of Fine Arts offers four Specialization programs in Music, each of 66 credits. Students applying for entrance to the Department are accepted into the Major in Integrative Music Studies. Upon completion of 30 credits, students may apply for transfer into a Specialization. Acceptance into a Specialization is based on the student's general academic performance in all University courses, but especially in the Music courses.</p> <table border="0"> <tr> <td style="vertical-align: top;"> <p>66 BFA Specialization in Jazz Studies</p> <p>6 JAZZ 200⁶ or, if exempt, Department of Music electives, excluding MUSI 200 and INMS 209 and 250</p> <p>21 JPER 220⁶; INMS 310⁶, 350^{6*}; MPER 231³</p> <p>6 MUSI 230⁶ or MUSI 231³ and 232³</p> <p>6 MHIS 200⁶ or, if exempt, MHIS electives</p> <p>6 MHIS electives</p> <p>18 Chosen from JAZZ 301³, 302³, 305⁶, 401³, 402³, 405⁶; JPER 321³, 330⁶, 341³, 421³, 422³, 430⁶, 441³</p> <p>3 Department of Music electives, excluding MUSI 200, INMS 209 and 250, chosen in consultation with a Music adviser.</p> <p><i>*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.</i></p> <p>66 BFA Specialization in Music Performance Studies</p> <p>30 INMS 209³, 250⁶, 310⁶, 350^{6*}; MPER 231³, 490⁶</p> <p>6 MUSI 230⁶ or MUSI 231³ and 232³</p> </td><td style="vertical-align: top;"> <p>6 MUSI 330⁶ or MPER 390⁶</p> <p>6 MHIS 200⁶ or, if exempt, MHIS electives</p> <p>6 MHIS electives</p> <p>12 Chosen from MPER 201³, 301³, 321³, 322³, 331³, 398³, 399⁶, 401³, 421³, 422³, 431³, 498³, 499⁶</p> <p><i>*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.</i></p> <p>66 BFA Specialization in Music Theory/Composition</p> <p>21 INMS 310⁶, 350⁶, 450⁶; MPER 231³</p> <p>6 MUSI 230⁶ or MUSI 231³ and 232³</p> <p>6 MHIS 200⁶ or, if exempt, MHIS electives</p> <p>6 MHIS electives</p> <p>6-12 INMS 320⁶, 360⁶, 398³, 399⁶; JAZZ 305⁶; EAMT 205⁶</p> <p>6 Chosen from INMS 460⁶, 498³, 499⁶; EAMT 305⁶; JAZZ 301³, 302³, 405⁶</p> <p>9-15 Department of Music electives, excluding MUSI 200, INMS 209 and 250, chosen in consultation with an adviser.</p> </td></tr> </table>	<p>66 BFA Specialization in Jazz Studies</p> <p>6 JAZZ 200⁶ or, if exempt, Department of Music electives, excluding MUSI 200 and INMS 209 and 250</p> <p>21 JPER 220⁶; INMS 310⁶, 350^{6*}; MPER 231³</p> <p>6 MUSI 230⁶ or MUSI 231³ and 232³</p> <p>6 MHIS 200⁶ or, if exempt, MHIS electives</p> <p>6 MHIS electives</p> <p>18 Chosen from JAZZ 301³, 302³, 305⁶, 401³, 402³, 405⁶; JPER 321³, 330⁶, 341³, 421³, 422³, 430⁶, 441³</p> <p>3 Department of Music electives, excluding MUSI 200, INMS 209 and 250, chosen in consultation with a Music adviser.</p> <p><i>*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.</i></p> <p>66 BFA Specialization in Music Performance Studies</p> <p>30 INMS 209³, 250⁶, 310⁶, 350^{6*}; MPER 231³, 490⁶</p> <p>6 MUSI 230⁶ or MUSI 231³ and 232³</p>	<p>6 MUSI 330⁶ or MPER 390⁶</p> <p>6 MHIS 200⁶ or, if exempt, MHIS electives</p> <p>6 MHIS electives</p> <p>12 Chosen from MPER 201³, 301³, 321³, 322³, 331³, 398³, 399⁶, 401³, 421³, 422³, 431³, 498³, 499⁶</p> <p><i>*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.</i></p> <p>66 BFA Specialization in Music Theory/Composition</p> <p>21 INMS 310⁶, 350⁶, 450⁶; MPER 231³</p> <p>6 MUSI 230⁶ or MUSI 231³ and 232³</p> <p>6 MHIS 200⁶ or, if exempt, MHIS electives</p> <p>6 MHIS electives</p> <p>6-12 INMS 320⁶, 360⁶, 398³, 399⁶; JAZZ 305⁶; EAMT 205⁶</p> <p>6 Chosen from INMS 460⁶, 498³, 499⁶; EAMT 305⁶; JAZZ 301³, 302³, 405⁶</p> <p>9-15 Department of Music electives, excluding MUSI 200, INMS 209 and 250, chosen in consultation with an adviser.</p>
<p>66 BFA Specialization in Jazz Studies</p> <p>6 JAZZ 200⁶ or, if exempt, Department of Music electives, excluding MUSI 200 and INMS 209 and 250</p> <p>21 JPER 220⁶; INMS 310⁶, 350^{6*}; MPER 231³</p> <p>6 MUSI 230⁶ or MUSI 231³ and 232³</p> <p>6 MHIS 200⁶ or, if exempt, MHIS electives</p> <p>6 MHIS electives</p> <p>18 Chosen from JAZZ 301³, 302³, 305⁶, 401³, 402³, 405⁶; JPER 321³, 330⁶, 341³, 421³, 422³, 430⁶, 441³</p> <p>3 Department of Music electives, excluding MUSI 200, INMS 209 and 250, chosen in consultation with a Music adviser.</p> <p><i>*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.</i></p> <p>66 BFA Specialization in Music Performance Studies</p> <p>30 INMS 209³, 250⁶, 310⁶, 350^{6*}; MPER 231³, 490⁶</p> <p>6 MUSI 230⁶ or MUSI 231³ and 232³</p>	<p>6 MUSI 330⁶ or MPER 390⁶</p> <p>6 MHIS 200⁶ or, if exempt, MHIS electives</p> <p>6 MHIS electives</p> <p>12 Chosen from MPER 201³, 301³, 321³, 322³, 331³, 398³, 399⁶, 401³, 421³, 422³, 431³, 498³, 499⁶</p> <p><i>*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.</i></p> <p>66 BFA Specialization in Music Theory/Composition</p> <p>21 INMS 310⁶, 350⁶, 450⁶; MPER 231³</p> <p>6 MUSI 230⁶ or MUSI 231³ and 232³</p> <p>6 MHIS 200⁶ or, if exempt, MHIS electives</p> <p>6 MHIS electives</p> <p>6-12 INMS 320⁶, 360⁶, 398³, 399⁶; JAZZ 305⁶; EAMT 205⁶</p> <p>6 Chosen from INMS 460⁶, 498³, 499⁶; EAMT 305⁶; JAZZ 301³, 302³, 405⁶</p> <p>9-15 Department of Music electives, excluding MUSI 200, INMS 209 and 250, chosen in consultation with an adviser.</p>		

66 BFA Specialization in Selected Music Studies	6 MHIS 200 ⁶ or, if exempt, MHIS electives
15 INMS 310 ⁶ , 350 ^{6*} ; MPER 231 ³	6 EAMT 205 ⁶
3-6 Chosen from MUSI 230 ⁶ , 231 ³ , 232 ³	15 Chosen from EAMT 305 ⁶ , 350 ⁶ , 406 ³ , 407 ³ , 451 ³ , 452 ³ , 471 ³ , 472 ³ , 498 ³
6 MHIS 200 ⁶ or, if exempt, MHIS electives	6 Department of Music electives
6 MHIS electives	
3-6 MUSI 491 ³ , 492 ³	54 BFA Major in Integrative Music Studies
27-30 Department of Music electives, excluding MUSI 200, INMS 209 and 250, chosen in consultation with a Music adviser	24 INMS 209 ³ , 250 ⁶ , 310 ⁶ , 350 ^{6*} ; MPER 231 ³
<i>*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.</i>	3-6 Chosen from MUSI 230 ⁶ , 231 ³ , 232 ³
<i>Eligibility:</i>	6 MHIS 200 ⁶ or, if exempt, MHIS electives
Completion of 30 credits, with a "B" average or better.	6 MHIS electives
<i>Entrance:</i>	12-15 Department of Music electives, excluding MUSI 200
Submission and approval of plan of course work and Special Project (MUSI 491).	<i>*With permission of the Department of Music, students with exemption for INMS 350 substitute INMS 450.</i>
<i>Review:</i>	
Upon completion of the courses in this Specialization, the Special Project is evaluated by the appropriate Review Committee. The type of evaluation used depends upon the nature of the project: exhibition, concert, recording, essay, musical production, etc.	24 Minor in Electroacoustic Studies
	12 EAMT 205 ⁶ , 305 ⁶
	6 Department of Music electives
	6 Chosen from MUSI 200 ⁶ ; JAZZ 200 ⁶ ; MHIS 200 ⁶
48 BFA Major in Electroacoustic Studies	24 Minor in Music
6 MUSI 200 ⁶	9 INMS 209 ³ and 250 ⁶ or, if exempt, Music electives selected in consultation with a Music adviser
9 INMS 209 ³ , 250 ⁶	15 Music electives chosen in consultation with a Music adviser

81.100.1
Admission to Programs in Music

The Department of Music has a distinct admission procedure in addition to the normal admission process of Concordia University. All applicants (to Music programs) attend an interview/audition as part of the admission process. At the time of their interview they will be required to write a Theory Placement Test (for placement in theory courses). Applicants are required to contact the Department of Music before March 1 to arrange their appointments and obtain other information regarding admission procedures. Applicants are admitted to the Major in Integrative Music Studies or the Major in Electroacoustic Studies.

81.100.2
Admission to Courses in Music for Non-Music Students

Specific procedures must be followed by all non-Music Majors wishing to register in the Department of Music.

- Not all courses are available to non-Music students. Please consult the Department of Music for policy and accessibility of courses.
- Students who wish to register for courses which have a theory prerequisite, given availability, must write the Theory Placement Test. This is done in the Department of Music at least two weeks prior to the registration appointment date.
- Students who wish to sing or play in an ensemble must contact the Department of Music for information concerning audition and registration for Music Performance courses.

Courses

For specific information regarding entrance to courses in the Department of Music please see above.

Music:

MUSI 200 Music Literacy and Keyboard Skills (6 credits)

An intensive introductory course in basic musical materials, with integrated practice in aural training and keyboard skills.
NOTE: Students in a Major, Minor, or Specialization program in the Department of Music

(excluding the Major and Minor in Electroacoustic Studies) may not take this course for credit.
NOTE: Students who have received credit for this topic under INMS 499 may not take this course for credit.

MUSI 223 Understanding Music (3 credits)
A course in analytical listening for the student who has little or no musical background. The

works studied represent the major styles and idioms of Western music. *NOTE A/See §200.3*
NOTE: Students in a Major, Minor, or Specialization program in the Department of Music may not take this course for credit towards their degrees.

NOTE: Students are limited to a maximum of 18 credits in Private Study.

MUSI 230 *Private Study I* (6 credits)
Prerequisite: Written permission of the Department of Music. This course offers individual vocal or instrumental instruction in an approved area of music coordinated with the student's program.
NOTE A/See §200.3

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

MUSI 231 *Private Study Ia* (3 credits)
Prerequisite: Written permission of the Department of Music. This course offers individual vocal or instrumental instruction in an approved area of music coordinated with the student's program.
NOTE: Students are required to assume part of the cost of private lessons.
NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

MUSI 232 *Private Study Ib* (3 credits)
Prerequisite: MUSI 231 and written permission of the Department of Music. A continuation of MUSI 231.

MUSI 330 *Private Study II* (6 credits)
Prerequisite: MUSI 230 or 231 or 232; second-year standing*; written permission of the Department of Music. A continuation of MUSI 230.
NOTE A/See §200.3
NOTE: Students enrolled in the Specialization in Music Performance Studies register in MPER 390.
NOTE: Students are required to assume part of the cost of private lessons.
NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.
**66 or fewer credits remaining in degree program.*

MUSI 331 *Private Study IIa* (3 credits)
Prerequisite: MUSI 230 or MUSI 231 and 232; second-year standing*; written permission of the Department of Music. A continuation of MUSI 232.
NOTE: Students are required to assume part of the cost of private lessons.
NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.
**66 or fewer credits remaining in degree program.*

MUSI 332 *Private Study IIb* (3 credits)
Prerequisite: MUSI 331 and written permission of the Department of Music. A continuation of MUSI 331.

MUSI 398 *Special Topics in Music*
(3 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

MUSI 399 *Special Topics in Music*
(6 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

MUSI 430 *Private Study III* (6 credits)
Prerequisite: MUSI 330 or 331 or 332; third-year standing*; written permission of the Department of Music. A continuation of MUSI 330.
NOTE A/See §200.3

NOTE: Students enrolled in the Specialization in Music Performance Studies register in MPER 490.

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

**33 or fewer credits remaining in degree program.*

MUSI 431 *Private Study IIIa* (3 credits)
Prerequisite: MUSI 330 or MUSI 331 and 332; third-year standing*; written permission of the Department of Music. A continuation of MUSI 332.
NOTE: Students are required to assume part of the cost of private lessons.
NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.
**33 or fewer credits remaining in degree program.*

MUSI 432 *Private Study IIIb* (3 credits)
Prerequisite: MUSI 431 and written permission of the Department of Music. A continuation of MUSI 431.

MUSI 491 *Special Project in Music*
(3 credits)

Prerequisite: Enrolment in the Specialization in Selected Music Studies. This course affords an opportunity for extensive development of a project under the direction of a Faculty member. Students submit a project proposal in accordance with the regulations for admission to the Specialization.

NOTE: Students repeating MUSI 491 register for MUSI 492 for credit provided the subject matter is different.

NOTE: If the special project is within the realm of performance, the student is required to participate in public performances.

MUSI 492 *Special Project in Music*
(3 credits)

Prerequisite: MUSI 491. A continuation of

MUSI 491.

NOTE: If the special project is within the realm of performance, the student is required to participate in public performances.

MUSI 498 *Special Topics in Music*
(3 credits)

Prerequisite: Written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

MUSI 499 *Special Topics in Music*
(6 credits)

Prerequisite: Written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

Electroacoustics and Music Technology:

EAMT 205 *Electroacoustics I* (6 credits)

A seminar/workshop in electroacoustics introducing composition through a series of directed studies involving tape editing, recording, musique concrète, processing of analog sounds, and analog synthesis. Other topics include history, acoustics and psychoacoustics, recent technological developments, digital signal processing, computer applications, and MIDI. Classroom and laboratory.

NOTE A/See §200.3

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for CMUS 310 may not take this course for credit.

EAMT 305 *Electroacoustics II* (6 credits)

Prerequisite: EAMT 205. A seminar/workshop in electroacoustics with continued work in composition, history, and sound technology. Technological developments, computer applications, MIDI, and contemporary techniques are explored in depth through a series of directed studies involving digital signal processing, multi-track studio techniques, digital synthesis and sampling. Classroom and laboratory. *NOTE A/See §200.3*

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for CMUS 410 may not take this course for credit.

EAMT 350 *Sound Recording and Reinforcement I* (6 credits)

Prerequisite: MUSI 200 or EAMT 205. An intensive hands-on seminar/workshop studying the techniques used to record and edit music in settings ranging from live concert performances to studio session recordings. Hands-on experience and aural perception is developed during ensemble rehearsal and recording sessions. Emphasis is placed on production topics such as multi-track recording, microphone placement

systems, audio processes. An understanding of the language of music through basic music appreciation skills as they relate to recording and editing of music is developed.

NOTE A/See §200.3

NOTE: Students who have received credit for CMUS 350 may not take this course for credit.

EAMT 398 *Special Topics in Electroacoustics and Technology* (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in electroacoustics and technology.

EAMT 399 *Special Topics in Electroacoustics and Technology* (6 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in electroacoustics and technology.

EAMT 406 *Electroacoustic Composition Seminar/Workshop I* (3 credits)

Prerequisite: EAMT 305. A seminar/workshop for advanced students in electroacoustics. The focus is compositional. An interdisciplinary aspect to the final project is encouraged.

Classroom and laboratory. *NOTE C/See §200.3*

NOTE: This is a full-year course.

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for CMUS 446 may not take this course for credit.

EAMT 407 *Electroacoustic Composition Seminar/Workshop II* (3 credits)

Prerequisite: EAMT 406. A continuation of EAMT 406.

NOTE: This is a full-year course.

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for CMUS 447 may not take this course for credit.

EAMT 451 *Sound Recording and Reinforcement II* (3 credits)

Prerequisite: EAMT 350. A continuation of EAMT 350. Emphasis is on advanced independent projects.

NOTE: This is a full-year course.

NOTE: Students who have received credit for CMUS 450 may not take this course for credit.

EAMT 452 *Sound Recording and Reinforcement III* (3 credits)

Prerequisite: EAMT 451. A continuation of EAMT 451.

NOTE: This is a full-year course.

EAMT 471* *Independent Study I* (3 credits)

Prerequisite: Written permission of the Department of Music. A student-designed course of study, approved by an advisor, that focuses on an

area of electroacoustics and/or music technology.
**Students may count a maximum of nine credits in independent studies towards their degree program.*

EAMT 472* Independent Study II (3 credits)
Prerequisite: EAMT 471 and written permission of the Department of Music. A student repeating EAMT 471 registers for EAMT 472 for credit.
**Students may count a maximum of nine credits in independent studies towards their degree program.*

EAMT 498 Special Topics in Electroacoustics and Technology (3 credits)
Prerequisite: Written permission of the Department of Music. An advanced study of a selected area not available in other courses in electroacoustics and technology.

EAMT 499 Special Topics in Electroacoustics and Technology (6 credits)
Prerequisite: Written permission of the Department of Music. An advanced study of a selected area not available in other courses in electroacoustics and technology.

Integrative Music Studies:

INMS 209 Aural Perception I (3 credits)
Prerequisite: MUSI 200 or exemption. A course designed to develop the musical ear through sight-singing, dictation, aural analysis. Classroom and laboratory.
NOTE: Students enrolled in any specialization offered by the Department of Music may not apply credits for this course towards the 90-credit degree requirements.
NOTE: Students who have received credit for this topic under INMS 499 or MUSI 210 may not take this course for credit.

INMS 250 Music Theory I (6 credits)
Prerequisite: MUSI 200 or exemption. An extensive course in music theory, including diatonic harmony, counterpoint, and keyboard skills.
NOTE: Students enrolled in any specialization offered by the Department of Music may not apply credits for this course towards the 90-credit degree requirements.
NOTE: Students who have received credit for this topic under INMS 499 or MUSI 210 may not take this course for credit.

INMS 310 Aural Perception II (6 credits)
Prerequisite: INMS 209 or exemption. A course in aural development through sight-reading, dictation, transcription and aural analysis.
NOTE A/See §200.3

INMS 320 Comparative Analysis I (6 credits)
Prerequisite: INMS 350 or exemption.
Development of analytical methodology. Study

of selected works representing various forms and styles from different historical periods.
NOTE A/See §200.3

INMS 350 Music Theory II (6 credits)
Prerequisite: INMS 250 or exemption. A workshop in theory, studying further development in chromatic harmony, counterpoint, and analysis. Approaches may include compositional exercises.
NOTE A/See §200.3
NOTE: Students who have received credit for INMS 200 may not take this course for credit.

INMS 360 Music Composition I (6 credits)
Prerequisite: Written permission of the Department of Music. A seminar/workshop in composition. Emphasis is on the development of the individual's composition skills.
NOTE A/See §200.3
NOTE: Students who have received credit for CMUS 320 may not take this course for credit.

INMS 398 Special Topics in Music Theory/Composition (3 credits)
Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

INMS 399 Special Topics in Music Theory/Composition (6 credits)
Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

INMS 410 Advanced Aural Training (6 credits)
Prerequisite: INMS 310 or exemption. An intensive study of selected problems in hearing, analysing, and transcribing music. The course combines individual and group exercises.
NOTE A/See §200.3

INMS 450 Advanced Music Theory (6 credits)
Prerequisite: INMS 350 or exemption. Analytical and compositional study of chromatic harmony, counterpoint, and longer forms, focusing on the musical styles of the nineteenth and twentieth centuries. *NOTE A/See §200.3*
NOTE: Students who have received credit for INMS 300 may not take this course for credit.

INMS 460 Music Composition II (6 credits)
Prerequisite: INMS 360 and written permission of the Department of Music. A continuation of INMS 360. *NOTE A/See §200.3*
NOTE: Students who have received credit for CMUS 420 may not take this course for credit.

INMS 471* Independent Study I (3 credits)
Prerequisite: Written permission of the Department of Music. A student-designed course of study that focuses on an approved area(s) of music theory, analysis, aural perception,

orchestration, and/or related disciplines, and involves consultation with an adviser.

NOTE C/See §200.3

**Students may count a maximum of nine credits in independent studies towards their degree program.*

INMS 472* Independent Study II (3 credits)

Prerequisite: Written permission of the Department of Music. A student repeating INMS 471 registers for INMS 472 for credit.

**Students may count a maximum of nine credits in independent studies towards their degree program.*

INMS 498 Special Topics in Music Theory/Composition (3 credits)

Prerequisite: Written permission of the Department of Music. An advanced study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

INMS 499 Special Topics in Music Theory/Composition (6 credits)

Prerequisite: Written permission of the Department of Music. An advanced study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

Jazz Studies:

JAZZ 200 The Language of Jazz (6 credits)

An introduction to the syntax, style, aesthetics, and sociology of jazz. The complete spectrum of styles and artists serves as the basis of materials for the course. *NOTE A/See §200.3*

NOTE: Students who have received credit for CMUS 200 may not take this course for credit.

JAZZ 301 Jazz Harmony (3 credits)

Prerequisite: JAZZ 200; MUSI 200; or exemptions. The basics of jazz harmony.

NOTE: Students who have received credit for this topic under an INMS 498 number may not take this course for credit.

JAZZ 302 Jazz Arranging I (3 credits)

Prerequisite: JAZZ 301. The introductory study of writing arrangements based upon compositions from the American popular song and jazz repertoires for small and medium-size jazz ensembles. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 332 may not take this course for credit.

JAZZ 305 Jazz Composition I (6 credits)

Prerequisite: JAZZ 302. A seminar/workshop in jazz composition. After an examination of components of composition from the jazz repertoire, students write original music based on the blues, American popular song forms, and such idioms as those in the style of bebop, bossa nova, ragtime, and modal jazz.

NOTE A/See §200.3

NOTE: Students who have received credit for CMUS 330 may not take this course for credit.

JAZZ 398 Special Topics in Jazz Studies (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

JAZZ 399 Special Topics in Jazz Studies (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

JAZZ 401 Jazz Arranging II (3 credits)

Prerequisite: JAZZ 302. The continued study of writing arrangements for large ensembles including original compositions and jazz repertoire. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 431 may not take this course for credit.

JAZZ 402 Jazz Arranging III (3 credits)

Prerequisite: JAZZ 401. The study of advanced techniques in jazz arranging. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 432 may not take this course for credit.

JAZZ 405 Jazz Composition II (6 credits)

Prerequisite: JAZZ 305. A continuation of JAZZ 305. *NOTE A/See §200.3*

NOTE: Students who have received credit for CMUS 430 may not take this course for credit.

JAZZ 471 Independent Study I** (3 credits)

Prerequisite: Second-year standing*, and written permission of the Department of Music. A student-designed course of study, approved by an advisor, that focuses on an area of jazz studies. *NOTE C/See §200.3*

**66 or fewer credits remaining in degree program.*

***Students may count a maximum of nine credits in independent studies towards their degree program.*

JAZZ 472 Independent Study II** (3 credits)

Prerequisite: JAZZ 471, second-year standing*, and written permission of the Department of Music. A student-designed course of study, approved by an advisor, that focuses on an area of jazz studies. *NOTE C/See §200.3*

**66 or fewer credits remaining in degree program.*

***Students may count a maximum of nine credits in independent studies towards their degree program.*

JAZZ 498 Special Topics in Jazz Studies (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

JAZZ 499 *Special Topics in Jazz Studies*
(6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

Jazz Performance:

JPER 220 *Jazz Ensemble I* (6 credits)

Prerequisite: JAZZ 200 previously or concurrently. A performance course in which students participate in various Concordia jazz ensembles. *NOTE A/See §200.3*

NOTE: Students are required to participate in public performances.

NOTE: Students who have received credit for CMUS 300 may not take this course for credit.

JPER 321 *Jazz Ensemble II* (3 credits)

Prerequisite: JPER 220. A continuation of JPER 220. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students are required to participate in public performances.

NOTE: Students who have received credit for CMUS 401 may not take this course for credit.

JPER 330 *Jazz Improvisation I* (6 credits)

Prerequisite: JAZZ 301 previously or concurrently; JAZZ 200. A performance-analysis course that examines the craft of jazz improvisation. A broad spectrum of jazz improvisational styles is examined. Participation in public performance is required.

NOTE: Students who have received credit for MPER 330 may not take this course for credit.

JPER 341 *Jazz Vocal Repertoire I*
(3 credits)

Prerequisite: JAZZ 200; MUSI 231 in voice previously or concurrently. A study of jazz vocal technique through performance of representative compositions and arrangements, and study of professional recordings illustrative of various jazz vocal styles. Special focus is on performance styles as they relate to building audience-performer relationships. Students are expected to participate in public performances.

NOTE: Students who have received credit for this topic under an MPER 498 number may not take this course for credit.

JPER 398 *Special Topics in Jazz Performance* (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. A study of a selected area not available in other courses in jazz performance.

JPER 399 *Special Topics in Jazz Performance* (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music.

A study of a selected area not available in other courses in jazz performance.

JPER 421 *Jazz Ensemble III* (3 credits)

Prerequisite: JPER 321. A continuation of JPER 321. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students are required to participate in public performances.

NOTE: Students who have received credit for CMUS 402 may not take this course for credit.

JPER 422 *Jazz Ensemble IV* (3 credits)

Prerequisite: JPER 421. A continuation of JPER 421. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students are required to participate in public performances.

JPER 430 *Jazz Improvisation II* (6 credits)

Prerequisite: JPER 330. A continuation of JPER 330.

NOTE: Students who have received credit for MPER 430 may not take this course for credit.

JPER 441 *Jazz Vocal Repertoire II*
(3 credits)

Prerequisite: JPER 341. A continuation of JPER 341.

NOTE: Students who have received credit for this topic under an MPER 498 number may not take this course for credit.

JPER 471 *Independent Study I*** (3 credits)

Prerequisite: Second-year standing* or equivalent, and written permission of the Department of Music. A student-designed course of study, approved by an advisor, on an area of jazz performance practice. When appropriate, the study may include a performance.

**66 or fewer credits remaining in degree program.*

***Students may count a maximum of nine credits in independent studies towards their degree program.*

JPER 472* *Independent Study II* (3 credits)

Prerequisite: JPER 471 and written permission of the Department of Music. A student repeating JPER 471 registers for JPER 472 for credit.

**Students may count a maximum of nine credits in independent studies towards their degree program.*

JPER 498 *Special Topics in Jazz Performance* (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced study of a selected area not available in other courses in jazz performance.

JPER 499 *Special Topics in Jazz Performance* (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced study of a selected area not available in other courses in jazz performance.

Music History:

MHIS 200 *Music History and Society* (6 credits)

A survey of musical styles in their social context, from pre-history to the present day. While emphasis is on the mainstream of the Western tradition, attention is also given to folk, popular, and jazz styles, as well as to the music of other cultures. *NOTE A/See §200.3*

MHIS 301 *Medieval and Renaissance Music* (3 credits)

Prerequisite: MHIS 200; INMS 209, 250. The development of the basic patterns of Western music is traced through the Middle Ages. The resulting musical styles from the mid-fifteenth to the end of the sixteenth century are examined in the context of the cultural changes which shaped the humanistic age.

NOTE: Students who have received credit for MHIS 311 or 312 may not take this course for credit.

MHIS 302 *Music of the Baroque* (3 credits)

Prerequisite: MHIS 200; INMS 209, 250. Representative works from the early seventeenth to the mid-eighteenth century. The evolution of "common practice" is traced in the forms, styles, and performance practices of the great masters and schools.

MHIS 303 *Classical and Early Romantic Music* (3 credits)

Prerequisite: MHIS 200; INMS 209, 250. A study of late eighteenth- and early nineteenth-century music. Representative works will be studied from the late Rococo, through the age of Haydn, Mozart, and Beethoven, and into the early Romantic style of Schubert.

MHIS 304 *Romanticism in Music* (3 credits)

Prerequisite: MHIS 200; INMS 209, 250. A study of the music of the nineteenth and early twentieth century. Representative works, styles and performance practices are studied as expressions of the romantic consciousness.

MHIS 305 *Music from the Post-Romantic to the Present* (3 credits)

Prerequisite: MHIS 200; INMS 209, 250. A study of music from the early twentieth century to the present. The roots of current trends in music are followed through their growth into the widely diverse styles of today.

MHIS 314 *Jazz History* (3 credits)

Prerequisite: MHIS 200. A study of the historical developments and the personalities that contributed to the evolution of jazz styles.

MHIS 471* *Independent Study I* (3 credits)

Prerequisite: Written permission of the Department of Music. A student-designed course of study that focuses on an approved area(s) of music history and/or related disciplines, and

involves consultation with an adviser.

NOTE C/See §200.3

**Students may count a maximum of nine credits in independent studies towards their degree program.*

MHIS 472* *Independent Study II* (3 credits)

Prerequisite: Written permission of the Department of Music. A student repeating MHIS 471 registers for MHIS 472 for credit.

**Students may count a maximum of nine credits in independent studies towards their degree program.*

MHIS 498 *Special Topics in Music History* (3 credits)

Prerequisite: Twelve credits in Music and written permission of the Department of Music. A study of a selected period, area, or contribution. In a given year, the study may examine any significant aspect of Western, non-Western, or other musics. *NOTE C/See §200.3*

Music in Education:

MINE 301 *Music for Classroom Use I* (3 credits)

Prerequisite: Enrolment in the Specialization in Early Childhood Education, Major in Child Studies, or written permission of the Department of Music. This course is designed to give the student a working knowledge of contemporary techniques of group instruction in music. At least one established or experimental method is covered in some depth: for example, Orff, Kodaly, Dalcroze, Martentot, Schafer, Dennis. While the main emphasis is on the cultivation of musicality in the preschool and elementary school child, the implications for music education in general are also explored. Classroom work includes opportunities for demonstration and practice teaching.

NOTE A/See §200.3

Music Performance Studies:

MPER 201 *Orchestra I* (3 credits)

Students enrolled in this course participate in the Concordia Orchestra.

NOTE: This is a full-year course.

MPER 231 *Choir I* (3 credits)

Students enrolled in this course participate in a Concordia choir.

NOTE A/See §200.3

NOTE: This is a full-year course.

NOTE: Students who have received credit for MPER 221 may not take this course for credit.

MPER 301 *Orchestra II* (3 credits)

Prerequisite: MPER 201. A continuation of MPER 201.

NOTE A/See §200.3

NOTE: This is a full-year course.

NOTE: Students who have received credit for this course as MPER 498 or MPER 300 may not take this course for credit.

MPER 321 Chamber Ensemble I (3 credits)
A study, through performance, of selected works from a broad range of repertoires. The works studied are determined by class needs and the particular skills of each student. Participation in public performances is required.
NOTE A/See §200.3
NOTE: This is a full-year course.

MPER 322 Chamber Ensemble II
(3 credits)
Prerequisite: MPER 321. A continuation of MPER 321. *NOTE A/See §200.3*
NOTE: This is a full-year course.

MPER 331 Classical Vocal Repertoire I
(3 credits)
Prerequisite: MUSI 200; MUSI 231 in voice previously or concurrently. A chronological study of the repertoire available to the solo singer. Vocal repertoire from the late Renaissance to the present is examined and performed by students. This seminar/workshop is based on a bibliography of selected readings, covering such topics as stylistic features, treatment of poetry and text, recital preparation, programming, vocal ornamentation, and recitative.
NOTE: This is a full-year course.
NOTE: Students who have received credit for this topic under an MPER 498 number may not take this course for credit.

MPER 332 Choir II (3 credits)
Prerequisite: MPER 231. A continuation of MPER 231. *NOTE A/See §200.3*
NOTE: This is a full-year course.
NOTE: Students who have received credit for this course as MPER 498 or MPER 420 may not take this course for credit.

MPER 370 Musical Performance Skills I
(6 credits)
Prerequisite: MUSI 200; INMS 209. A seminar/workshop on specific problems in learning, teaching, and developing musical performance skills. Included is the analysis and organization of practice technique, reading, memory, performance practices, style, interpretation, accompaniment, and recital preparation. Particular attention is given to the integration of skill with musical understanding.
NOTE A/See §200.3

MPER 390 Advanced Private Study I
(6 credits)
Prerequisite: MUSI 230 or MUSI 231 and 232; enrolment in the Specialization in Music Performance Studies; written permission of the Department of Music. This course offers intensive vocal or instrumental instruction for students specializing in performance. A juried examination is required. *NOTE A/See §200.3*
NOTE: Students are required to bear part of the cost of private lessons.
NOTE: Students who have received credit for MUSI 330 may not take this course for credit.

MPER 398 Special Topics in Music Performance (3 credits)
Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in music performance.

MPER 399 Special Topics in Music Performance (6 credits)
Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in music performance.

MPER 401 Orchestra III (3 credits)
Prerequisite: MPER 301. A continuation of MPER 301. *NOTE A/See §200.3*
NOTE: This is a full-year course.
NOTE: Students who have received credit for this course as MPER 498 or MPER 400 may not take this course for credit.

MPER 421 Chamber Ensemble III
(3 credits)
Prerequisite: MPER 322. A continuation of MPER 322. *NOTE A/See §200.3*
NOTE: This is a full-year course.

MPER 422 Chamber Ensemble IV
(3 credits)
Prerequisite: MPER 421. A continuation of MPER 421. *NOTE A/See §200.3*
NOTE: This is a full-year course.

MPER 431 Classical Vocal Repertoire II
(3 credits)
Prerequisite: MPER 331. A continuation of MPER 331.
NOTE: This is a full-year course.
NOTE: Students who have received credit for this topic under an MPER 498 number may not take this course for credit.

MPER 432 Choir III (3 credits)
Prerequisite: MPER 331. A continuation of MPER 331. *NOTE A/See §200.3*
NOTE: This is a full-year course.
NOTE: Students who have received credit for this course as MPER 498 or MPER 420 may not take this course for credit.

MPER 441 Performance Practice/Documentation (3 credits)
Prerequisite: Written permission of the Department of Music. A study of historical sources applied directly to performance. Topics covered include ornamentation, improvisation, figured bass, "The Doctrine of the Affections", early notation, and bibliography.

MPER 442 Performance Practice/Documentation (3 credits)
Prerequisite: MPER 441. A continuation of MPER 441.

MPER 470 Musical Performance Skills II
(6 credits)
Prerequisite: MPER 370. A continuation of MPER 370. *NOTE A/See §200.3*

MPER 471* *Independent Study I* (3 credits)

Prerequisite: Written permission of the Department of Music. A student-designed course of study that focuses on an approved area(s) of performance practice, performance theory/analysis, pedagogy, and/or related disciplines, and involves consultation with an adviser. When appropriate, the study may include a demonstration/performance.

NOTE C/See §200.3

**Students may count a maximum of nine credits in independent studies towards their degree program.*

MPER 472* *Independent Study II* (3 credits)

Prerequisite: Written permission of the Department of Music. A student repeating MPER 471 registers for MPER 472 for credit.

**Students may count a maximum of nine credits in independent studies towards their degree program.*

**MPER 490 *Advanced Private Study II*
(6 credits)**

Prerequisite: MUSI 330, or MUSI 331 and 332, or MPER 390; enrolment in the Specialization in Music Performance Studies; third-year standing*; written permission of the Department of Music. A continuation of MPER 390. An approved public recital may be substituted for the juried examination.

NOTE A/See §200.3

NOTE: Students are required to bear part of the cost of private lessons.

**33 or fewer credits remaining in degree program.*

MPER 498 *Special Topics in Music Performance* (3 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in performance. Selected problems in the development of performance skills. The areas covered are, whenever possible, determined by the specific interests of the students. Topics in any given year may include technique, practice, style, interpretation, accompaniment, ensemble, teaching children, the adult student.

NOTE A,C/See §200.3

MPER 499 *Special Topics in Music Performance* (6 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in performance. Selected problems in the development of performance skills. The areas covered are, whenever possible, determined by the specific interests of the students. Topics, in any given year, may include technique, practice, style, interpretation, accompaniment, ensemble, teaching children, the adult student.

NOTE A,C/See §200.3

81.110

STUDIO ARTS

Faculty	<p><i>Chair</i> PENELOPE COUSINEAU-LEVINE, <i>Associate Professor</i></p> <p><i>Professors</i> ANDREW DUTKEWYCH LEOPOLD PLOTEK MARION WAGSCHAL IRENE WHITTOME</p> <p><i>Associate Professors</i> GISELE AMANTEA RAYMONDE APRIL YVES BILODEAU THÉRÈSE CHABOT TIM CLARK A. LUNT EVERGON JUDY GARFIN</p>	<p>TREVOR GOULD LYNN HUGHES DANICA JOJICH CHERYL KOLAK-DUDEK WOLFGANG KROL BARBARA LAYNE DAVID MOORE FRANÇOIS MORELLI MARK RUWEDEL LEILA SUJIR KATHERINE TWEEDIE JANET WERNER</p> <p><i>Assistant Professors</i> INGRID BACHMANN SHAWN BAILEY DAVID ELLIOT</p>
Location	<p><i>Sir George Williams Campus</i> Visual Arts Building, Room: VA 236 (514) 848-4262/4263</p>	
Department Objectives	<p>The Department of Studio Arts offers programs that emphasize the importance of practical work with practising artists. Through a series of courses in ceramics, drawing, fibres, painting, photography, print media, and sculpture, students increase their awareness of what constitutes creativity and understanding of the aesthetic and intellectual aspects of art today. In addition, the Department offers a program in Interdisciplinary Studies for students whose work extends beyond the boundaries of traditional disciplines in the Fine Arts, as well as a program in Women and the Fine Arts, which allows students to complete interdisciplinary work associated with the issue of gender in the arts.</p>	
<p><i>Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20.</i> <i>The superscript indicates credit value.</i></p>		
81.110.1	STUDIO ART	
Program Objective	<p>The Major in Studio Arts offers students the freedom for exploration while still developing proficiency within a disciplinary core. The program encourages the cross-referencing of different creative traditions within a solid, historical, theoretical and studio foundation. Its primary objective is to give students the choice to define their own needs in tailoring an individualized program of studies within open parameters. Students are encouraged to choose among a series of studio art electives and progressively establish their concentration or concentrations through required higher-level disciplinary courses. While promoting a respect for disciplines, the program stresses diversity and versatility across studio options.</p> <p>Students may select their 48 studio art credits required in any media. There is also a similar range from which students can select 12 credits in Art History. Within these specifications, students may fulfil the requirements of the Major in Studio Art either by specializing in a medium or combining studios in a number of them. However, students must complete one studio course at the 300 level (intermediate) and meet the 400 level (advanced) in the same discipline to fulfil their requirements.</p>	
Program	<p>60 BFA Major in Studio Art</p> <p>6 Chosen from ARTX 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser</p> <p>6 Chosen from Art History electives; ARTT electives; ART 261⁶, 460⁶; or SCUL 465⁶</p> <p>6 DRAW 200⁶</p> <p>6 Art History electives</p> <p>24 Studio Art electives*</p>	

- 12 Chosen from 300⁶- and 400⁶-level courses in a single medium from one of the following disciplines: Ceramics; Drawing; Fibres; Painting; Print Media; Sculpture.

**Studio Art courses offered by the Department of Design Art and the Department of Art Education and Art Therapy may be selected as Studio Art electives, but these credits do not satisfy the 300- and 400-level sequence requirements.*

<i>Admission to the Major in Studio Art</i>	<p>In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Studio Art.</p> <p>All applicants must submit a <i>portfolio</i> of their own work, as well as a <i>letter of intent</i> as part of the admission process. In addition to recommending admission to a program, the Portfolio Evaluation Committee may recommend the completion of either ARTX 250, 260, or 270 as part of a student's program.</p> <ol style="list-style-type: none"> 1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work. 2. Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums. 3. Individual works must be labelled including applicant's name, date, size of work, and medium(s) used. 4. Each portfolio must contain a list of contents including all the above information. 5. Works <i>larger than 20 x 24 inches (50 x 60 centimetres)</i> and three-dimensional works must be submitted in slide form. 6. Portfolios should include a copy of recent academic record. 7. Portfolios should be presented in a sturdy folder; works should be flat and unframed. 8. Out-of-town applicants may submit photographs and/or slides of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense. 9. Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them. 10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her program choices, even if these choices are within the same department. <p>Applicants must submit this portfolio to the Department of Studio Arts, Visual Arts Building, Room 237, between March 7 – 20, 2001 (4:00 PM).</p>
81.110.2	CERAMICS
<i>Program Objective</i>	<p>Ceramics offers students a unique opportunity to develop the production of individual studio work in a context in which contemporary art-making practice is linked to a rich and diverse material history. A vital program within the Studio Arts Department, courses in Ceramics regularly include special collaborative projects, field trips and visiting artists. In addition, the Ceramics program can also provide students with an important point of departure for investigating diverse subjects ranging from traditional craft practice to new technology.</p> <p>Well-equipped studios and scheduled labs afford students the means to develop technical skills and to seek information specific to their needs. Course content at all levels of the program includes seminar discussion pertinent to both students' work and concerns related to the current practice of ceramics. At an advanced level and in consultation with an adviser, students in Ceramics have the opportunity to pursue independent-study courses.</p>
<i>Program</i>	<p>60 BFA Major in Ceramics</p> <p>30 CERA 230⁶, 330⁶, 430⁶; SCUL 465⁶; DRAW 200⁶</p> <p>6 ARTH 264³, 350³</p> <p>6 Chosen from Art History electives; ARTT electives; ART 261⁶ or 460⁶</p> <p>6 SCUL 200⁶, FBRS 240⁶, 260⁶, 370⁶</p> <p>6 Electives from Ceramics, Fibres, or Sculpture</p> <p>6 Chosen from ARTX 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser*</p> <p><i>*Recommended to be taken in the first year.</i></p>
<i>Admission to the Major in Ceramics</i>	<p>Applicants to Ceramics may apply to enter directly into the Major in Ceramics, or enter the Major in Studio Art with the intention of transferring upon completion of the first year.</p> <p>In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Ceramics.</p> <p>All applicants must submit a <i>portfolio</i> as part of the admission process.</p> <ol style="list-style-type: none"> 1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work. 2. Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums. 3. Individual works must be labelled including applicant's name, date, size of work, and medium(s) used. 4. Each portfolio must contain a list of contents including all the above information.

5. Works *larger than 20 x 24 inches (50 x 60 centimetres)* and three-dimensional works must be submitted in slide form.
6. Portfolios should be presented in a sturdy folder; works should be flat and unframed.
7. Out-of-town applicants may submit photographs and/or slides of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense.
8. Portfolios must consist of approximately 50% three-dimensional work and include work in the area to which the student is applying.
9. Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them.
10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her program choices, even if these choices are within the same department.
11. Portfolios must be submitted to the Department of Studio Arts between March 7 – 20, 2001 (4:00 PM).

Examples of three-dimensional work should include work in at least two mediums, and should demonstrate creative ability. The two-dimensional work should demonstrate an ability to draw, compose, and use colour imaginatively and creatively.

81.110.3	FIBRES
<i>Program Objective</i>	<p>Fibres is a cross-media program of study that explores the relationship of materials to culture. Informed by discourses of post-modernism, feminism, and traditional aesthetics, the Fibres program offers an opportunity for intensive study, both practical and theoretical, of the art, technology and history of textiles. Such creative and critical investigation, allied with technical proficiency, provides the base students need to develop as young artists.</p> <p>Courses are available at all levels, ranging from beginner classes to independent study for advanced students wishing to focus on a single project. Students concentrating in other areas of Fine Arts are welcome to take most courses offered in the Fibres area.</p>
<i>Program</i>	<p>60 BFA Major in Fibres</p> <p>18 FBRS 240⁶, 260⁶; SCUL 465⁶</p> <p>6 FBRS 340⁶ or 360⁶</p> <p>6 FBRS 480⁶</p> <p>6 ARTH 266³, 352³</p> <p>6 Chosen from Art History electives; ARTT electives; ART 261⁶ or 460⁶</p> <p>6 SCUL 200⁶; DRAW 200⁶; CERA 230⁶</p> <p>6 Chosen from ARTX 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser*</p> <p>6 Electives from Ceramics, Fibres, or Sculpture</p> <p><i>*Recommended to be taken in the first year.</i></p>
<i>Admission to the Major in Fibres</i>	<p>Applicants to Fibres may apply to enter directly into the Major in Fibres, or enter the Major in Studio Art with the intention of transferring upon completion of the first year.</p> <p>In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Fibres.</p> <p>All applicants must submit a <i>portfolio</i> as part of the admission process.</p> <ol style="list-style-type: none"> 1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work. 2. Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums. 3. Individual works must be labelled including applicant's name, date, size of work, and medium(s) used. 4. Each portfolio must contain a list of contents including all the above information. 5. Works <i>larger than 20 x 24 inches (50 x 60 centimetres)</i> and three-dimensional works must be submitted in slide form. 6. Portfolios should be presented in a sturdy folder; works should be flat and unframed. 7. Out-of-town applicants may submit photographs and/or slides of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense. 8. Portfolios must consist of approximately 50% three-dimensional work and include work in the area to which the student is applying. 9. Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them. 10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her program choices, even if these choices are within the same department. 11. Portfolios must be submitted to the Department of Studio Arts between March 7 – 20, 2001 (4:00 PM). <p>Examples of three-dimensional work should include work in at least two mediums, and should demonstrate creative ability. The two-dimensional work should demonstrate an ability to draw, compose, and use colour imaginatively and creatively.</p>

81.110.4	INTERDISCIPLINARY STUDIES
<i>Program Objective</i>	<p>The Major in Interdisciplinary Studies offers the possibility of working towards the completion of a program that permits the student to investigate and integrate a very wide range of disciplines — music, painting, photography, dance, theatre, sound-based work, drawing, computer imaging, writing as art, performance art, installations, sculpture, fibres, print media, book works, video, and ceramics. In support of this interdisciplinary activity, the Department has established a curricular structure whereby each student, with the assistance of a faculty member, may develop a sequential program of study that allows for both vertical and lateral movements within the visual and performing arts areas. Furthermore, specialized IDYS studio/seminar courses are provided so that students can work together on both individual and collective projects.</p>
<i>Program</i>	<p>60 BFA Major in Interdisciplinary Studies 12 IDYS 200⁶, 300⁶ *30 Credits from the Visual and Performing Arts programs *12 VDEO 300⁶ and 350⁶, or lecture/seminar credits in the Visual and Performing Arts *6 VDEO 400⁶ or SCUL 490⁶, or one 400-level course in the Visual and Performing Arts *These credits are to be chosen with the assistance of an IDYS and/or Performing Art faculty adviser. NOTE: It is recommended that students consider taking up to 12 credits of lecture/seminar courses from the Department of Communication Studies to apply as electives outside Fine Arts.</p>
<i>Admission to the Major in Interdisciplinary Studies</i>	<p>The Interdisciplinary Studies Major has a distinct admission procedure in addition to the normal admission process of Concordia University. All applicants are required to attend an <i>interview</i> and present an <i>audition</i> or <i>portfolio</i> as part of the admission process. Applicants must contact the program office between March 1 – 15 to arrange their appointments and for detailed information regarding audition/portfolio/interview requirements. Applicants must also submit a <i>letter of intent</i> along with a copy of their academic record directly to the program coordinator at the same time that they submit their completed application to the Office of the Registrar, i.e. prior to March 1. This short letter of intent should summarize the applicant's academic and artistic backgrounds and describe their particular interests and goals in Interdisciplinary Studies within Fine Arts.</p>
81.110.5	PAINTING AND DRAWING
<i>Program Objective</i>	<p>The Department of Studio Arts provides an in-depth program in Painting and Drawing, combining theoretical, historical, and practical study at all undergraduate levels. The aim is to provide students with a broad foundation on which they can base their own creative contributions. Studio courses, seminars, and independent projects on such varied topics as open media, collage, and women's studies, supplement the core courses on painting and drawing. Recognizing the importance of providing basic skills and knowledge, in an atmosphere of freedom, the program is supported by a large number of faculty and guest artists, exposing students to a full range of approaches to drawing and painting. A graduate program in Painting and Drawing and Open Media is available for further studies.</p>
<i>Program</i>	<p>60 BFA Major in Painting and Drawing 12 DRAW 200⁶, 300⁶ 12 PTNG 200⁶, 300⁶ 12 Chosen from ART 320⁶, 420⁶, DRAW 420⁶, PTNG 420⁶ 6 Chosen from ARTX 250⁶, 260⁶, 270⁶ or a Studio Art elective, in consultation with an adviser 6 ARTH 366³ and 367³ 6 Studio Art elective (excluding ART, PTNG, and DRAW courses) 6 Chosen from Art History electives (excluding ARTH 433⁶, 434⁶); ARTT electives; ART 261⁶ or 460⁶, in consultation with an adviser</p>
<i>Admission to the Major in Painting and Drawing</i>	<p>In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Painting and Drawing. All applicants must submit a <i>portfolio</i> of their own work, as well as a <i>letter of intent</i> as part of the admission process.</p> <ol style="list-style-type: none"> 1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work. 2. Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums. 3. Individual works must be labelled including applicant's name, date, size of work, and medium(s) used.

4. Each portfolio must contain a list of contents including all the above information.
5. Works *larger than 20 x 24 inches (50 x 60 centimetres)* and three-dimensional works must be submitted in slide form.
6. Portfolios should include a copy of recent academic record.
7. Portfolios should be presented in a sturdy folder; works should be flat and unframed.
8. Out-of-town applicants may submit photographs and/or slides of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense.
9. Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them.
10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her program choices, even if these choices are within the same department.
11. Portfolios must be accompanied by a *letter of intent* explaining the applicant's special interests in painting and drawing.

Applicants must bring both their portfolios and their letters of intent to the Department of Studio Arts, Visual Arts Building, Room 237, between March 7 – 20, 2001 (4:00 PM).

<p>81.110.6</p> <p><i>Program Objective</i></p>	<p>PHOTOGRAPHY</p> <p>The Photography program acknowledges photography as a discipline with a distinct artistic and historical identity. It also recognizes that contemporary photographic practice encompasses a rich multiplicity of formal and conceptual approaches. The course structure of the program and the orientation of its faculty reflect a concern that the students receive a strong historical and theoretical comprehension of the medium. The program stresses the need for students to acquire the concepts and vocabulary necessary for critical discussion of their own photographic work and that of others. Emphasis is placed on the understanding of photography's sociological and artistic ramifications.</p>
<p><i>Programs</i></p>	<p>60 BFA Major in Photography 36 PHOT 200⁶, 221³, 250⁶, 300⁶, 311³, 331³, 341³, 400⁶ 6 Photography electives 6 Art History electives 12 Visual Arts electives</p> <p>30 Minor in Photography 12 PHOT 200⁶, 250⁶ 12 Chosen from PHOT 221³, 300⁶, 311³, 312³, 322³, 331³, 332³, 341³, 398³, 399⁶, 498³ 6 Photography or Visual Arts electives</p>
<p><i>Admission to the Major or Minor in Photography</i></p>	<p>Applicants are required to submit a completed official Application for Admission form to the Office of the Registrar by March 1.</p> <p>In addition, all applicants must submit a <i>portfolio</i>, a <i>letter of intent</i>, a photocopy of their most recent academic transcript, and a photocopy of Page 1 of the applicant's General Application Form.</p> <p>The letter of intent should include the following information:</p> <ol style="list-style-type: none"> 1. A list of all courses and workshops in photography that have been completed (including when and where). 2. A discussion of the context of the portfolio's contents (i.e. when the photos were taken — in a class, on the student's own, etc.) 3. A discussion of the particular area(s) within the field of photography which interest the student. <p>Portfolios must be submitted to the Department of Studio Arts, VA 237, between March 7 – 20, 2001 from 9:30 to 11:30 AM and 1:30 to 4:30 PM only. Contents of the portfolio should consist of 10 to 20 preferably black-and-white photographic images (in recognition of the limited background some applicants have in photography, commercially printed photos are acceptable).</p> <p>The committee prefers well-edited portfolios which indicate a specific interest or concern of the applicant. It is recognized that applicants may have limited training in the medium, therefore examples of work done in other visual arts media may be submitted to supplement the photographic portfolio.</p>

<p>81.110.7</p> <p><i>Program Objective</i></p>	<p>PRINT MEDIA</p> <p>The Print Media program provides students with a milieu to investigate the meaningful relationships that exist between the technologies of reproduction, individual expression, and contemporary society. Print Media offers multiple venues for student research from intaglio, lithography, and serigraphy to digital and virtual approaches. Experimental, innovative, and critical work is encouraged. Special topics and theory courses provide support for individual aesthetic development and explore the intersections of interdisciplinary practice.</p> <p>Students in the Print Media program are expected to develop a strong critical understanding of their work and its relationship to contemporary society, as well as develop professional skills and an awareness of the diversity inherent in art practice.</p>
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The 60-credit BFA Major in Print Media and the 30-credit Minor in Print Media were first offered in their new form in September 1997.

<i>Program</i>	60 BFA Major in Print Media
	36 Print Media: 6–12 Credits at the 200 level 12–24 Credits at the 300 level 6–18 Credits at the 400 level 6 Studio Art elective credits 6 Fine Arts elective credits 6 Art History elective credits 6 Art History or Art Theory elective credits
<i>Admission to the Major or Minor in Print Media</i>	30 Minor in Print Media
	18 Print Media: 3–9 Credits at the 200 level 6–9 Credits at the 300 level 3–9 Credits at the 400 level 6 Studio Art elective credits 6 Fine Arts elective credits
	<p>Applicants to Print Media may apply to enter directly into the Major in Print Media or may enter the Major in Studio Art with the intention of transferring upon completion of the first year.</p> <p>In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Print Media. All applicants must submit a <i>portfolio</i>, as well as a <i>letter of intent</i>, as part of the admission process.</p> <ol style="list-style-type: none"> 1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work. 2. Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums. 3. Individual works must be labelled including applicant's name, date, size of work, and medium(s) used. 4. Each portfolio must contain a list of contents including all the above information. 5. Works <i>larger than 20 x 24 inches (50 x 60 centimetres)</i> and three-dimensional works must be submitted in slide form. 6. Portfolios should be presented in a sturdy folder; works should be flat and unframed. 7. Out-of-town applicants may submit slides (photographs if slides are not available) of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense. In addition, for the Major/Minor in Print Media: 8. Portfolios must contain a minimum of 10 works in drawing and/or prints. 9. Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them. 10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her program choices, even if these choices are within the same department. 11. Portfolios must be submitted to the Department of Studio Arts between March 7 – 20, 2001 (4:00 PM).

81.110.8	SCULPTURE
<i>Program Objective</i>	<p>The Sculpture program offers the opportunity for intensive study, both practical and theoretical, of the art and technology of sculpture. Within the Fine Arts curriculum, these courses help students to explore the relationship between object, material, and space. Such creative investigation, allied with technical proficiency, provides the base students need to develop as young artists.</p> <p>Courses are available at all levels, ranging from beginner classes to independent study for advanced students wishing to focus on a single project. To enrich their artistic training, students concentrating in other areas of Fine Arts may also take most courses offered in sculpture.</p>

<i>Program</i>	60 BFA Major in Sculpture
	36 SCUL 200 ⁶ , 300 ⁶ , 400 ⁶ , 465 ⁶ , 490 ⁶ ; DRAW 200 ⁶ 6 Art History electives 6 Chosen from Art History electives; ARTT electives; ART 261 ⁶ or 460 ⁶ 6 Chosen from the Department of Studio Arts 6 Chosen from a Studio Art elective, in consultation with an adviser*
	<i>*Recommended to be taken in the first year.</i>

<i>Admission to the Major in Sculpture</i>	<p>Applicants to Sculpture may apply to enter directly into the Major in Sculpture, or enter the Major in Studio Art with the intention of transferring upon completion of the first year.</p> <p>In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to Sculpture. All applicants must submit a <i>portfolio</i> as part of the admission process.</p> <ol style="list-style-type: none"> 1. Portfolios should consist of a minimum of 20 and maximum of 30 of the applicant's own work. 2. Portfolios should consist of both two-dimensional and three-dimensional work in a variety of mediums. 3. Individual works must be labelled including applicant's name, date, size of work, and medium(s) used. 4. Each portfolio must contain a list of contents including all the above information. 5. Works <i>larger than 20 x 24 inches (50 x 60 centimetres)</i> and three-dimensional works must be submitted in slide form. 6. Portfolios should be presented in a sturdy folder; works should be flat and unframed. 7. Out-of-town applicants may submit photographs and/or slides of their work. Applicants must make arrangements to ensure the return of their portfolios at their own expense. 8. Portfolios must consist of approximately 50% three-dimensional work and include work in the area to which the student is applying. 9. Upon receipt of portfolios, applicants will be given specific dates upon which to retrieve them. 10. It is the responsibility of the applicant to ensure that a portfolio, where required, is submitted to each of his/her program choices, even if these choices are within the same department. 11. Portfolios must be submitted to the Department of Studio Arts between March 7 – 20, 2001 (4:00 PM). <p>Examples of three-dimensional work should include work in at least two mediums, and should demonstrate creative ability. The two-dimensional work should demonstrate an ability to draw, compose, and use colour imaginatively and creatively.</p>
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81.110.9	WOMEN AND THE FINE ARTS
<i>Program</i>	<p>24 Minor in Women and the Fine Arts</p> <p>6 WFAR 320⁶</p> <p>6 WSDB 290³, 291³</p> <p>12 Electives in the Faculty of Fine Arts, chosen with the permission of a program adviser</p>

<i>Admission to the Minor in Women and the Fine Arts</i>	<p>In addition to submitting a completed official application form to the Office of the Registrar by March 1, applicants seeking admission to the Minor in Women and the Fine Arts must send a copy of their academic record and a letter of intent explaining their interest in the Minor to the Coordinator of the program by March 1, 2001.</p>
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<i>Courses</i>	<div> <p>Art:</p> <p>ART 261 Aesthetic Inquiry in Visual Arts (6 credits)</p> <p>Prerequisite: Enrolment in a BFA program or written permission of the Department. A seminar addressing the principles and theories relating to the objects and events of visual arts. Topics include the artistic process as expression, intuition, and imagination. Further consideration is given to the products of painting, sculpture, and graphics, emphasizing various contemporary critical and theoretical stances.</p> <p>NOTE A/See §200.3</p> <p>ART 320 Studio/Seminar in Painting and Drawing (6 credits)</p> <p>Prerequisite: DRAW 200; PTNG 200; ART 261 or written permission of the Department. A combination studio/seminar in which advanced ideas in painting and drawing are addressed. Special topics of approximately one month duration are presented by guest artists from within and outside the Faculty.</p> </div> <div> <p>ART 417 Open Media (6 credits)</p> <p>Prerequisite: Thirty credits in Studio Art; 400-level studio courses concurrently; or written permission of the Department. A seminar encompassing an unlimited range and combination of materials.*</p> <p>The varied nature of this approach invites students to provide their own circumstances for creating work. NOTE A/See §200.3</p> <p>*Students are required to bear the cost of materials and, when loan arrangements cannot be made through the University, equipment rental.</p> <p>ART 420 Materials and Methods of the Artist (6 credits)</p> <p>Prerequisite: DRAW 300; PTNG 300 or written permission of the Department. Through a series of special projects in the media of drawing and painting, this course familiarizes the student with some of the historical materials, techniques, and other aspects of the artist's concerns.</p> <p>NOTE: Students who have credit for ART 234 or ARTH 267 or 434 may not take this course for credit.</p> </div>
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ART 460 *Analysis of Great Works of Art*
(6 credits)

A course in art principles. Through the formal analysis of selected masterpieces of painting and sculpture, the student is led to a fuller comprehension of the nature of formal order in the arts. *NOTE A/See §200.3*

Art Studio:

ARTX 250 *Visual Language as Content*
(6 credits)

Prerequisite: Enrolment in a BFA program or written permission from a designated Studio Art adviser. A studio course focusing on visual language as content. Colour and its permutations, line, shape, pattern, texture, and composition are the personal vocabulary of each artist. The claiming of this language is central to an art practice; it will be established through two- and three-dimensional projects which challenge students to explore their capacity to visually articulate their complexity as beings in nature and culture.

NOTE: Students who have received credit for SFAR 250 may not take this course for credit.

ARTX 260 *Integrated Drawing: Intersections* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission from a designated Studio Art adviser. A studio course which embraces various attitudes towards drawing. As an alternative approach, students experience the medium from the different perspectives of various disciplines. The course will explore the possibilities of non-traditional materials and strategies for producing drawings. Analogue (narrative) and notation, as well as the notion of aesthetic and non-aesthetic uses of drawing (such as mapping, charting, making diagrams, documenting) will be investigated.

NOTE: Students who have received credit for SFAR 260 may not take this course for credit.

ARTX 270 *Extended Studio Practices*
(6 credits)

Prerequisite: Enrolment in a BFA program or written permission from a designated Studio Art adviser. A studio course which introduces the diversity of contemporary art practice and theory. Alternative venues, interactive art forms, questions of authorship, the significance of the object/artifact, and perceptions other than visual are among the subjects to be explored.

NOTE: Students who have received credit for SFAR 270 may not take this course for credit.

ARTX 398 *Special Topics in Contemporary Studio Arts Practice* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. This studio course brings together students with a practice based in any of the studio disciplines, and/or who have been following an interdisciplinary practice, allowing discussion and

exchange on their work in relation to the aspect of art making that this special topic addresses.

ARTX 399 *Special Topics in Contemporary Studio Arts Practice* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. This studio course brings together students with a practice based in any of the studio disciplines, and/or who have been following an interdisciplinary practice, allowing discussion and exchange on their work in relation to the aspect of art making that this special topic addresses.

ARTX 480 *Integrated Studio in Contemporary Art Practices*
(6 credits)

Prerequisite: 300-level studio course previously and enrolment in a program offered by the Department of Studio Arts, or written permission of the Department. This studio/seminar course will focus on the development of a student's individual studio practice within the context of different disciplinary issues and concerns that will be examined in relationship to contemporary art making. Students will be encouraged to actively engage in the discussion of their studio work and a variety of theoretical readings.

Art Theory:

ARTT 398 *Special Topics in Studio Arts: Ideas and Issues* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. This seminar course provides the opportunity for students of various studio practices to discuss changing issues in theory/practice. Visual material, directed readings, exhibition visits, and invited speakers will be determined by the special topic.

ARTT 399 *Special Topics in Studio Arts: Ideas and Issues* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. This seminar course provides the opportunity for students of various studio practices to discuss changing issues in theory/practice. Visual material, directed readings, exhibition visits, and invited speakers will be determined by the special topic.

Ceramics:

CERA 230 *Ceramics I* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introduction to clay as an art medium employing the various techniques of forming, shaping, and decorating for firing and glazing.
NOTE A/See §200.3

CERA 330 *Ceramics II* (6 credits)

Prerequisite: CERA 230 or permission of the coordinator. An advanced course in technical

and historical research in various ceramic processes with an emphasis on glazes and the use of different clay bodies. *NOTE A/See §200.3*

CERA 398 *Special Topics in Ceramics*
(3 credits)

Prerequisite: Third-year standing* and written permission of the Department. A workshop/seminar, providing an opportunity for the study of specialized aspects of ceramics.

NOTE C/See §200.3

**fewer than 33 credits remaining in the degree program.*

CERA 399 *Special Topics in Ceramics*
(6 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for the study of specialized aspects in ceramics. *NOTE C/See §200.3*

CERA 430 *Ceramics III* (6 credits)

Prerequisite: CERA 330 or permission of the coordinator. The development of a body of personal work and a refinement of specific problems in clay.

CERA 450 *Independent Study* (6 credits)

Prerequisite: Third-year standing*; CERA 430, previously or concurrently; and written permission of the Department. This workshop provides the opportunity for a limited number of students to independently pursue advanced studies in ceramics. *NOTE A/See §200.3*

**fewer than 33 credits remaining in the degree program.*

Drawing:

DRAW 200 *Drawing I* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An exploration of drawing as a means of expression. Various media are employed to examine and express form, space, figurative, and other graphic images. Drawing from observation, imagination, and memory is included. *NOTE A/See §200.3*

DRAW 300 *Drawing II* (6 credits)

Prerequisite: DRAW 200. A drawing course in which various media and forms of expression are explored at the more advanced level. Lectures and studio periods.

NOTE A/See §200.3

DRAW 399 *Special Topics in Drawing*
(6 credits)

Prerequisite: DRAW 200; written permission of the Department. A studio course which provides an opportunity for the study of more specialized aspects of drawing.

DRAW 400 *Drawing III* (6 credits)

Prerequisite: DRAW 300. Continuation of DRAW 300. *NOTE A/See §200.3*

DRAW 420 *Seminar/Workshop in Drawing*
(6 credits)

Prerequisite: ART 320 or written permission of the Department. An advanced studio in drawing having its principal emphasis in studio practice, but developing further the theoretical concepts introduced in ART 320.

DRAW 450 *Advanced Studio in Drawing*
(6 credits)

Prerequisite: DRAW 400. A continuation of DRAW 400.

DRAW 470 *Independent Study* (6 credits)

Prerequisite: DRAW 420 previously or concurrently, or written permission of the Department. A course of independent study in which the advanced student explores a specific area of drawing. *NOTE A/See §200.3*

DRAW 498 *Special Topics in Drawing*
(3 credits)

Prerequisite: Third-year standing* and written permission of the Department. A course for advanced students which provides an opportunity for the study of more specialized areas in drawing.

NOTE C/See §200.3

**fewer than 33 credits remaining in degree program.*

DRAW 499 *Special Topics in Drawing*
(6 credits)

Prerequisite: Third-year standing* and written permission of the Department. A course for advanced students which provides an opportunity for the study of more specialized areas in drawing.

NOTE C/See §200.3

**fewer than 33 credits remaining in degree program.*

Electronic Arts:

EART 300 *Interactivity Studio in Electronic Arts* (6 credits)

Prerequisite: Second-year standing* and enrolment in a program offered by the Department of Studio Arts, or written permission of the Department. This studio course focuses on interactive technologies in relation to contemporary art practices (installation, performance, kinetic sculpture, and others). An interdisciplinary and cybernetic approach to media control and expression (such as sound, lighting, still images, video) using computers and electronics will allow students from different options to pursue individual or team work.

**66 or fewer credits remaining in degree program.*

EART 398 *Special Topics in Electronic Arts* (3 credits)

Prerequisite: Second-year standing* and enrolment in a program offered by the Department of Studio Arts, or written permission of the Department. This studio course provides an opportunity

for the study of specialized aspects of electronic arts.

**66 or fewer credits remaining in degree program.*

EART 399 *Special Topics in Electronic Arts* (6 credits)

Prerequisite: Second-year standing* and enrolment in a program offered by the Department of Studio Arts, or written permission of the Department. This studio course provides an opportunity for the study of specialized aspects of electronic arts.

**66 or fewer credits remaining in degree program.*

EART 470 *Independent Study in Electronic Arts* (6 credits)

Prerequisite: Third-year standing* and enrolment in a program offered by the Department of Studio Arts, and written permission of the Department. A course of independent study in which the student explores a specific area of electronic arts.

**33 or fewer credits remaining in degree program.*

EART 471 *Independent Study in Electronic Arts I* (3 credits)

Prerequisite: Third-year standing* and enrolment in a program offered by the Department of Studio Arts, and written permission of the Department. A course of independent study in which the student explores a specific area of electronic arts.

**33 or fewer credits remaining in degree program.*

EART 472 *Independent Study in Electronic Arts II* (3 credits)

Prerequisite: EART 471 and written permission of the Department. A course of independent study in which the student explores a specific area of electronic arts.

Fibres:

FBRS 240 *Fibre Structures I* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introductory course in which students explore the expressive potential of various materials and processes of fibre structures such as loom weaving, feltmaking, basketry, surface applications, and other experimental constructions. *NOTE A/See §200.3*

FBRS 260 *Textile Printing and Dyeing I* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introductory course in which students explore the creative potential of printing, painting, dyeing, resist work, and construction with fabric. *NOTE A/See §200.3*

FBRS 340 *Fibre Structures II* (6 credits)

Prerequisite: FBRS 240 or permission of the coordinator. An intermediate level course which emphasizes the visual and conceptual develop-

ment of the student in fibre media. Complex woven structures, painting and dyeing, fibre sculpture, and other experimental approaches are explored.

FBRS 360 *Textile Printing and Dyeing II* (6 credits)

Prerequisite: FBRS 260 or permission of the coordinator. An intermediate level course in textile printing and dyeing with an emphasis on content. Students investigate traditional and non-traditional approaches such as resist work, discharge, and photo processes.

FBRS 370 *Papermaking* (6 credits)

Prerequisite: Eighteen credits in Studio Art, or permission of the coordinator. The making of paper and its use as a medium of expression. The scope of investigation ranges from surface and image to embossing, casting, and three-dimensional construction.

FBRS 398 *Special Topics in Fibres* (3 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for study of specialized aspects of fibres. *NOTE C/See §200.3*

FBRS 399 *Special Topics in Fibres* (6 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for the study of specialized aspects in fibres. *NOTE C/See §200.3*

FBRS 450 *Independent Study* (6 credits)

Prerequisite: Third-year standing*; FBRS 480, previously or concurrently; and written permission of the Department. This workshop provides the opportunity for a limited number of students to independently pursue advanced studies in Fibres. **fewer than 33 credits remaining in the degree program.*

FBRS 480 *Advanced Fibres* (6 credits)

Prerequisite: FBRS 340 or 360, or permission of the coordinator. An advanced level course in which students create a personal body of work, refine technical expertise, and develop a visual and critical language related to fibres and textiles. *NOTE C/See §200.3*

Interdisciplinary Studies:

IDYS 200 *Studio Seminar in Interdisciplinary Studies I* (6 credits)

Prerequisite: Enrolment in the Major in Interdisciplinary Studies or written permission of the Interdisciplinary Studies program coordinator. A studio/seminar course providing the basis for an interwoven theory and practice in an interdisciplinary context. An art practice is developed through a critical approach to materials, issues, and artmaking. Required readings pertinent to

current issues are discussed in relation to studio production.

NOTE: With permission of the appropriate Department Chair, this course may satisfy a studio or seminar elective requirement in a student's degree program. Students are required to bear the costs of materials and processing, if applicable.

IDYS 300 *Studio Seminar in Interdisciplinary Studies II* (6 credits)

Prerequisite: Interdisciplinary Studies 200, and second-year standing* in the Major in Interdisciplinary Studies, or written permission of the Interdisciplinary Studies program coordinator. A practice-oriented seminar focusing on topics central to the interdisciplinary study of art in contemporary social and cultural contexts. Issues within areas such as history, gender, race, and technology are considered within the context of varying perspectives. Students' studio production is challenged within a contemporary interdisciplinary environment.

NOTE: With permission of the appropriate Department Chair, this course may satisfy a studio or seminar elective requirement in a student's degree program. Students are required to bear the costs of materials and processing, if applicable.

**66 or fewer credits remaining in degree program.*

IDYS 490 *Independent Study* (6 credits)

Prerequisite: Third-year standing* and written permission of the Interdisciplinary Studies program coordinator. A course of independent study in which the student explores a specific interdisciplinary project.

**33 or fewer credits remaining in degree program.*

IDYS 491 *Independent Study I* (3 credits)

Prerequisite: Third-year standing* and written permission of the Interdisciplinary Studies program coordinator. A course of independent study in which the student explores a specific interdisciplinary project.

NOTE C/See §200.3

**33 or fewer credits remaining in degree program.*

IDYS 492 *Independent Study II* (3 credits)

Prerequisite: IDYS 491 and written permission of the Interdisciplinary Studies program coordinator. A student who has completed IDYS 491 may register under 492.

IDYS 498 *Special Topics in Interdisciplinary Study* (3 credits)

Prerequisite: Written permission of the Interdisciplinary Studies program coordinator. An intensive study of specific aspects of interdisciplinary study.

IDYS 499 *Special Topics in Interdisciplinary Study* (6 credits)

Prerequisite: Written permission of the Interdisciplinary Studies program coordinator. An intensive study of specific aspects of interdisciplinary study.

Painting:

PTNG 200 *Painting I* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An exploration of painting, colour, style, image, visual skills, and the technology of painting materials. *NOTE A/See §200.3*

PTNG 300 *Painting II* (6 credits)

Prerequisite: PTNG 200. A course in which various media and forms of expression are explored at the more advanced level. *NOTE A/See §200.3*

PTNG 399 *Special Topics in Painting* (6 credits)

Prerequisite: PTNG 200; written permission of the Department. A studio course which provides an opportunity for the study of more specialized aspects of painting.

PTNG 400 *Painting III* (6 credits)

Prerequisite: PTNG 300. A continuation of PTNG 300. *NOTE A/See §200.3*

PTNG 420 *Seminar/Workshop in Painting* (6 credits)

Prerequisite: ART 320 or written permission of the Department. An advanced studio in painting having its principal emphasis in studio practice, but developing further the theoretical concepts introduced in ART 320. *NOTE A/See §200.3*

PTNG 430 *Women and Painting* (6 credits)

Prerequisite: PTNG 200 or written permission of the Department. A studio/seminar course in which students are encouraged to explore their world in painting and consider their practice from the point of view of women's experience, individually and collectively.

NOTE A/See §200.3

PTNG 440 *Collage* (6 credits)

Prerequisite: Written permission of the Department. An exploration of collage as a means of expression evolving from the historical and artistic traditions of painting and drawing. *NOTE A/See §200.3*

PTNG 450 *Advanced Studio in Painting* (6 credits)

Prerequisite: PTNG 400. A continuation of PTNG 400. *NOTE A/See §200.3*

PTNG 470 *Independent Study* (6 credits)

Prerequisite: PTNG 420 previously or concurrently, or written permission of the Department. A course of independent study in which the advanced student explores a specific area in painting. *NOTE A/See §200.3*

PTNG 498 *Special Topics in Painting* (3 credits)

Prerequisite: Third-year standing* and written permission of the Department. A course for advanced students which provides an opportunity for the study of more specialized areas in

painting. *NOTE C/See §200.3*

**fewer than 33 credits remaining in degree program.*

PTNG 499 *Special Topics in Painting*
(6 credits)

Prerequisite: Third-year standing* and written permission of the Department. A course for advanced students which provides an opportunity for the study of more specialized areas in painting.

NOTE C/See §200.3

**fewer than 33 credits remaining in degree program.*

Photography:

PHOT 200 *Foundations in Photographic Vision: Theory and Practice I*
(6 credits)

Prerequisite: Enrolment in the Major or Minor in Photography or second-year standing* in a Specialization/Major in the Faculty of Fine Arts**. An exploration of the aesthetics of photography through the rapid accumulation of images in the field and through the study of contact sheets and prints in the studio. Emphasis is placed upon developing an ability to see photographically. Technical procedures, including optical functions and the camera, photographic chemistry, film and paper processing are taught.

NOTE A/See §200.3

**fewer than 66 credits remaining in degree program.*

***Students enrolled in a Specialization/Major in Performing Arts or the Major in Interdisciplinary Studies must obtain written permission of the Department.*

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 221 *Colour Photography I*
(3 credits)

Prerequisite: PHOT 200 and 250 previously or concurrently, and enrolment in the Major or Minor in Photography, or written permission of the Department. A studio course introducing the use of colour as another photographic process, parallel to black and white production and practice taught in PHOT 200. It investigates the particular technical and creative aspects. Students learn practical methods of colour printing using the positive-negative process and are encouraged to use these techniques in a self-expressive manner. A brief historical survey of colour processes is presented.

NOTE: Students who have received credit for PHOT 320 or 321 may not take this course for credit.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 250 *Development of Photographic Traditions* (6 credits)

Prerequisite: Enrolment in the Major or Minor in

Photography, or second-year standing* in a Specialization/Major in the Faculty of Fine Arts, or written permission of the Department. A course tracing the development of photography from its earliest appearance to the present. Issues are dealt with historically and thematically and include ideas about photographs as documents, means of social criticism, forms of personal expression, and sequential imagery. Reference is made to the relationship between photographs and other forms of art, and to the social or political contexts which influenced its development.

**fewer than 66 credits remaining in degree program.*

PHOT 300 *Photographic Vision: Theory and Practice II* (6 credits)

Prerequisite: PHOT 200 and 250 and enrolment in the Major or Minor in Photography, or written permission of the Department. A course in which the student is encouraged to refine and enhance a photographic vision. The course focuses on individual exploration in a context of exchange, discussion, and research. A written proposal in the second semester leads to the completion of a final portfolio.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 311 *Large Format Photography I*
(3 credits)

Prerequisite: PHOT 200 and 250 and enrolment in the Major or Minor in Photography, or written permission of the Department. A studio course introducing large format photography, its techniques and application. Field trips and demonstrations cover the basics of view camera operation, light metering, sheet film exposure, development, and advanced printing. Assignments based on traditional genres encourage ease with all aspects of large format use and their personal applications.

NOTE: Students who have received credit for PHOT 310 may not take this course for credit.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 312 *Large Format Photography II*
(3 credits)

Prerequisite: PHOT 200, 250, 311 and enrolment in the Major or Minor in Photography, or written permission of the Department. A studio course directed towards the development of an individual approach to view camera photography. Various uses of advanced techniques are also discussed. Emphasis is put on the development of a coherent portfolio of prints expressing personal concerns.

NOTE: Students who have received credit for PHOT 310 may not take this course for credit.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 322 *Colour Photography II*
(3 credits)

Prerequisite: PHOT 200, 250; PHOT 221 or 321; and enrolment in the Major or Minor in Photography, or written permission of the Department. A continuation of PHOT 221, this course explores further techniques in colour photography and advanced colour printing. Aesthetic issues such as changing attitudes towards the colour medium and its role in documentary work are discussed. A final portfolio reflects the students' personal approach to colour photography.

NOTE: Students who have received credit for PHOT 320 may not take this course for credit.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 331 *Digital Photography I* (3 credits)

Prerequisite: PHOT 200; PHOT 221 previously or concurrently; and enrolment in the Major in Photography, or written permission of the Department. An introductory studio course investigating the technical and creative aspects of digital photography. This course provides students with an understanding of the digital image and a practical application of the tools within their personal approach to photography. Students will explore the production of digital photographs, emphasizing the manipulation of images with software and the preparation for different formats. Issues related to the use of digital imagery within the larger context of photography will be explored.

NOTE: Students who have received credit for this topic under a PHOT 498 number may not take this course for credit.

NOTE: Students are required to bear the cost of removable storage devices, printing, and other materials.

PHOT 332 *Digital Photography II*
(3 credits)

Prerequisite: PHOT 331 and enrolment in the Major or Minor in Photography, or written permission of the Department. This advanced course expands on the basic control skills and creative aspects of digital technology by implementing personal approaches to the use of technology. Emphasis is on the creative development and advanced use of technology for the production of a portfolio.

NOTE: Students who have received credit for this topic under a PHOT 498 number may not take this course for credit.

NOTE: Students are required to bear the cost of removable storage devices, printing, and other materials.

PHOT 341 *Introduction to Contemporary Issues in Photography*
(3 credits)

Prerequisite: PHOT 250 and enrolment in the Major or Minor in Photography, or written permission of the Department. A seminar course exploring various theoretical approaches to

contemporary photographic practice. Readings will form the basis of discussions, which will be complemented by lectures, guests, visits to exhibitions, and other relevant activities. Varied critical approaches will be introduced. Students are expected to produce short essays and complete one major research paper. Required texts will vary from year to year.

NOTE: Students who have received credit for PHOT 340 may not take this course for credit.

PHOT 398 *Special Topics in Photography*
(3 credits)

Prerequisite: Written permission of the Department. An opportunity for the study of limited and more specialized aspects of photography.

NOTE C/See \$200.3

PHOT 399 *Special Topics in Photography*
(6 credits)

Prerequisite: Written permission of the Department. An opportunity for the study of limited and more specialized aspects of photography.

NOTE C/See \$200.3

PHOT 400 *Advanced Workshop in Photography* (6 credits)

Prerequisite: PHOT 300 and third-year standing* in the Major in Photography, or written permission of the Department. A studio course in which students pursue one or more extended photographic projects in black and white and/or colour. Topics related to contemporary photography are presented in a seminar fashion.

NOTE: Each student's personal work is evaluated by a jury of photography faculty twice during the year.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

**fewer than 33 credits remaining in degree program.*

PHOT 470 *Professional Internship*
(6 credits)

Prerequisite: Third-year standing* in the Major in Photography and written permission of the Department. A student wishing to work in an apprentice capacity with an established photographic artist, or wishing pursue research in photographic criticism, museum work, publication, or other related endeavours may apply for academic credit. The internship will be carried out under the joint supervision of a qualified professional (from within or without the University) and a full-time Photography faculty member. A clearly defined agreement between the Department, the student, and the artist or institution involved will be arrived at before the internship is undertaken. This agreement should state clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student.

**fewer than 33 credits remaining in degree program.*

PHOT 471 Professional Internship I
(3 credits)

Prerequisite: Third-year standing* in the Major in Photography and written permission of the Department. A student wishing to work in an apprentice capacity with an established photographic artist, or wishing to pursue research in photographic criticism, museum work, publication, or other related endeavours may apply for academic credit. The internship will be carried out under the joint supervision of a qualified professional (from within or without the University) and a full-time Photography faculty member. A clearly defined agreement between the Department, the student, and the artist or institution involved will be arrived at before the internship is undertaken. This agreement should state clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student.

**fewer than 33 credits remaining in degree program.*

PHOT 472 Professional Internship II
(3 credits)

Prerequisite: Third-year standing* in the Major in Photography and written permission of the Department. Students who wish additional internships in a professional milieu may take this course.

**fewer than 33 credits remaining in degree program.*

PHOT 481 Independent Study I (3 credits)

Prerequisite: Written permission of the Department. A course of independent study in which the student explores a specific area of photography.

PHOT 482 Independent Study II (3 credits)

Prerequisite: PHOT 481 and written permission of the Department. A student repeating PHOT 481 registers for credit under PHOT 482.

PHOT 498 Special Topics in Photography
(3 credits)

Prerequisite: Written permission of the Department. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of photography.

PHOT 499 Special Topics in Photography
(6 credits)

Prerequisite: Written permission of the Department. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of photography.

Print Media:

PRIN 211 Intaglio I (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introductory studio course in intaglio techniques with an emphasis on creative imagery. This course covers traditional acid and non-acid techniques

including drypoint, power engraving tools, aquatint, digital imaging, light-sensitive plates and methods of printing. Lectures and critiques will focus on theoretical, historical, and aesthetic issues in contemporary print media.

NOTE: Students who have received credit for PRIN 210 may not take this course for credit.

PRIN 221 Lithography I (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introductory studio course in the basic principles of hand-printed stone and photo-digital plate lithography with an emphasis on image development. Drawing and processing images on stone, creating digital files, hand-drawn and digitally generated transparencies, registration, edition printing, and an introduction to colour will be covered. Through assignments, group critiques, and individual discussions with the instructor, students will investigate print media in the context of contemporary culture and explore the theoretical and aesthetic issues in the creation of printed artworks.

NOTE: Students who have received credit for PRIN 220 may not take this course for credit.

PRIN 231 Screenprinting I (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introductory studio course in the basic techniques of screenprinting with an emphasis on creative imagery. This course covers stencil techniques including computer imaging, digital and hand-drawn transparencies, light-sensitive emulsion, registration and colour printing. Students will explore the theoretical and conceptual issues of printed artwork in studio practice.

NOTE: Students who have received credit for PRIN 230 may not take this course for credit.

PRIN 311 Intaglio II (3 credits)

Prerequisite: PRIN 211 or written permission of the Department. An intermediate-level studio course in intaglio with an emphasis on multi-plate imagery, including digital applications in print, colour separations, registration, colour proofing and printing. Students will be expected to develop individual projects that explore theoretical issues in contemporary print practice.

NOTE: Students who have received credit for PRIN 210 may not take this course for credit.

PRIN 321 Lithography II (3 credits)

Prerequisite: PRIN 221 or written permission of the Department. An intermediate studio course in lithography where students will explore diverse conceptual and technical approaches to creating printed colour images. Drawing, digital imaging, photo-transfer methods, photo-plate processes, colour separation, inks, registration and colour printing will be covered. Emphasis through class discussions, slide lectures, visiting artists and critiques is placed on the development of individual studio art practice.

NOTE: Students who have received credit for PRIN 220 may not take this course for credit.

PRIN 331 Screenprinting II (3 credits)
Prerequisite: PRIN 231 or written permission of the Department. A studio course in the techniques of screenprinting at the intermediate level. This course will provide the opportunity for continued research in digital imaging and computer print applications, colour printing, alternative printing surfaces and the combination of print processes. Students will be required to create a body of artwork that demonstrates their theoretical and conceptual knowledge of contemporary print media.

NOTE: Students who have received credit for PRIN 230 may not take this course for credit.

PRIN 341 Digital Print Media I (3 credits)
Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio course with an emphasis on exploring the interdisciplinary, multimedia, and theoretical aspects of digital prints. The focus will be on analogue/digital models, strategies for cultural sampling from the numeric matrix, and the convergence of print with new forms of mass communication such as the Internet.

PRIN 351 Digital Print Processes
(3 credits)
Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio course in the basic concepts of digital imaging and print applications. This course covers file creation, layers and channels for multi-plate hand-printing, resolution, registration, and file export to various digital print formats. Lectures and critiques will focus on theoretical, critical, and aesthetic issues in contemporary digital print media.

PRIN 371 Contemporary Print Processes
(3 credits)
Prerequisite: Enrolment in a BFA program or written permission of the Department. This studio course will address specific topics in print processes and new technologies. Students will create a portfolio of artwork that demonstrates their research.
NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 381 Aspects of Print Media
(3 credits)
Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio course that will explore specific problems in the discourse of print media. Students will create a body of artwork that demonstrates critical thinking and research on the featured topic.
NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 398 Special Topics in Print Media
(3 credits)
Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio

course that examines ideas and practices in contemporary print media. Students will produce printed images that reflect their research and critical thinking on the specific topic.
NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 399 Special Topics in Print Media
(6 credits)
Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio course that examines ideas and practices in contemporary print media. Students will produce printed images that reflect their research and critical thinking on the specific topic.
NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 411 Intaglio III (3 credits)
Prerequisite: PRIN 311 (or PRIN 210 before September 1997) or written permission of the Department. An advanced studio course for students who want to refine their expertise in intaglio techniques through experimentation and innovation. This course provides the opportunity for further exploration in digital imaging, photo-generated imagery, multiple-plate colour imagery, alternative print surfaces, combined print processes and new technologies. Students will be required to develop a coherent portfolio that demonstrates their involvement in contemporary print media.

PRIN 421 Lithography III (3 credits)
Prerequisite: PRIN 321 or written permission of the Department. An advanced studio course that offers students the opportunity to refine their expertise in the creation of hand-drawn and digitally generated images in lithography while exploring experimental and innovative artwork. Emphasis is on individual creative development. Students may choose to explore unique prints, combine print processes, create sequential imagery, three-dimensional and installation projects, and cross-disciplinary work as alternative formats for the lithographic print. Demonstrations, slide and artists' presentations, lectures and critiques will focus on advanced lithographic print approaches and individual interpretation in the creation of artwork.

PRIN 431 Screenprinting III (3 credits)
Prerequisite: PRIN 331 or written permission of the Department. An advanced studio course where students will investigate digital print applications, experimental imagery, combined techniques and diverse forms of printing. Group critiques and lectures will emphasize problem solving and critical analysis in the creation of personal imagery.

PRIN 441 Digital Print Media II (3 credits)
Prerequisite: PRIN 341 or written permission of the Department. An advanced studio course emphasizing innovative and critical approaches

to the digital print. Students will develop an independent research project and produce interdisciplinary work that investigates digital reproduction technologies.

PRIN 451 *Projects in Print Media I*
(3 credits)

Prerequisite: Six credits in Print Media or written permission of the Department. A studio course where students propose and complete print projects in consultation with the instructor. This course is an opportunity for students to continue their aesthetic research with in-depth and focused print projects. Students will design projects according to their interests and established technical proficiency. The course will emphasize individual practice within the context of informed discussion, group and individual critiques, gallery and museum visits, and may include an exhibition.

NOTE: Students who want advanced technical information in a particular process should enrol in 300- or 400-level courses of intaglio, screenprinting or lithography.

PRIN 452 *Projects in Print Media II*
(3 credits)

Prerequisite: PRIN 451 or written permission of the Department. A studio course that provides the opportunity for advanced research into personal imagery and a commitment to print processes. This course is a continuation PRIN 451.

PRIN 470 *Independent Study in Print Media* (6 credits)

Prerequisite: Enrolment in a BFA program and written permission of the Department. A studio course of independent study for which the student proposes a research project. The scope of the project and schedule of work should be equivalent to the workload of a six-credit course.
NOTE A/See §200.3

PRIN 471 *Independent Study in Print Media I* (3 credits)

Prerequisite: Enrolment in a BFA program and written permission of the Department. A studio course of independent study in which the student proposes a research project. The scope of the project and schedule of work should be equivalent to the workload of a three-credit course.

PRIN 472 *Independent Study in Print Media II* (3 credits)

Prerequisite: PRIN 471 and written permission of the Department. A studio course of independent study in which the student proposes a research project. The scope of the project and schedule of work should be equivalent to the workload of a three-credit course.

PRIN 481 *Professional Internship*
(3 credits)

Prerequisite: Written permission of the Department. Internships are for students who wish to obtain practical experience by working as an

apprentice in a professional environment, or who would like to pursue research in the curating of prints, print criticism, or other related experience in print media, and receive academic credit for the activity. Approval of the project will be based on the demonstrable learning potential of the activity. Students are required to submit an internship proposal that clearly defines the objective of the activity, appropriate workload (equivalent to the hours required for a three-credit course), nature of participation, and supervisory schedules. The internship will be jointly supervised by a faculty member and a qualified professional. It is the student's responsibility to obtain approval for the proposal from a program adviser, including any required contractual agreements, before the start of the internship.

PRIN 498 *Special Topics in Print Media*
(3 credits)

Prerequisite: Six credits in Print Media or written permission of the Department. A studio course for advanced students that examines ideas and practices in contemporary print media. Students will produce printed images that reflect their research and critical thinking on the specific topic.
NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 499 *Special Topics in Print Media*
(6 credits)

Prerequisite: Six credits in Print Media or written permission of the Department. A studio course for advanced students that examines ideas and practices in contemporary print media. Students will produce printed images that reflect their research and critical thinking on the specific topic.
NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

Sculpture:

SCUL 200 *Sculpture I* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An investigation into the modes of expression in sculpture through a variety of contemporary and traditional materials and methods including casting, modelling, construction, and welding.
NOTE A/See §200.3

SCUL 300 *Sculpture II* (6 credits)

Prerequisite: SCUL 200 or permission of the coordinator. Investigation into materials and methods emphasizing an individual form of study. The development of concepts and their application, imagination, and vocabulary is essential. *NOTE A/See §200.3*

SCUL 398 *Special Topics in Sculpture*
(3 credits)

Prerequisite: Third-year standing*; written permission of the Department. A workshop/seminar course providing an opportunity for the

study of specialized aspects of sculpture.

NOTE C/See §200.3

**fewer than 33 credits remaining in the degree program.*

SCUL 399 *Special Topics in Sculpture*
(6 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for the study of specialized aspects in sculpture. *NOTE C/See §200.3*

SCUL 400 *Sculpture III* (6 credits)

Prerequisite: SCUL 300 or permission of the coordinator. Advanced investigation into a single or group of concepts and materials through the development of a body of personal work.
NOTE A/See §200.3

SCUL 450 *Independent Study* (6 credits)

Prerequisite: Third-year standing*; SCUL 400, previously or concurrently; and written permission of the Department. This course provides the opportunity for a limited number of students to pursue advanced studies in sculpture.
NOTE A/See §200.3

**fewer than 33 credits remaining in degree program.*

SCUL 465 *Contemporary Practice and Theory in Sculpture* (6 credits)

Prerequisite: Enrolment in the Major in Sculpture, in Ceramics, or in Fibres; or written permission of the Department. A seminar course which looks at recent sculpture practice and theory from an artist's point of view. Readings and lectures will be complemented by visiting artists, visits to exhibitions, presentations, and other related activities.

SCUL 490 *Advanced Studio Practice*
(6 credits)

Prerequisite: Enrolment in the Major in Sculpture, in Ceramics, or in Fibres; or written permission of the Department. A studio course providing an opportunity for the advanced student to work in an intimate context within a studio setting, structured around current topics of theoretical and practical importance.

Video:

VDEO 300 *Video Art Production* (6 credits)

Prerequisite: Second-year standing*; VDEO 350 previously or concurrently; and written permission of the Studio Arts Department or the School of

Cinema. A studio course introducing video technology as a tool for aesthetic investigation and creation. Students work individually and collaboratively to develop a proficiency in the medium and evolve their particular thematic and formal concerns. Conceptual issues specific to video are also discussed through the analysis and demonstration of video art.

NOTE: Students are required to bear the cost of materials.

**66 or fewer credits remaining in degree program.*

VDEO 350 *Video History and Theory*
(6 credits)

A survey lecture course introducing the history and theory of art video practice since its inception in the 1960's. The course locates the roots of this art form in such divergent impulses as conceptualism, community activism, technological experimentation, and broadcast television, as well as in narrative and documentary traditions. In addition, regional Canadian video artists and cooperatives are situated within international historical trends and the development of post-modern and other theoretical perspectives. Weekly screenings.

VDEO 400 *Advanced Video Art Practices*
(6 credits)

Prerequisite: VDEO 300, 350; and written permission of the Department. A studio/seminar course that permits students to pursue an advanced investigation of the aesthetic and technical aspects of video art practices through the development of a personal body of work.
NOTE: Students are required to bear the cost of materials.

Women and the Fine Arts:

WFAR 320 *Women and the Fine Arts I*
(6 credits)

An investigation of the visual and performing arts as they pertain to issues of gender. Studio practices in relation to theoretical and critical concerns are investigated. *NOTE A/See §200.3*
NOTE: Students who have received credit for FFAR 320 may not take this course for credit.

WFAR 420 *Women and the Fine Arts II*
(6 credits)

Prerequisite: WFAR 320 or written permission of the coordinator. A continuation of WFAR 320.
NOTE: Students who have received credit for FFAR 420 may not take this course for credit.

81.120 THEATRE

Faculty	<p><i>Chair</i> ERIC MONGERSON, Associate Professor</p> <p><i>Professors</i> GERALD GROSS PHILIP SPENSLEY</p> <p><i>Associate Professors</i> RALPH ALLISON KIT BRENNAN</p>	<p>GENE GIBBONS NANCY HELMS EDWARD LITTLE</p> <p><i>Assistant Professors</i> KAIRIIN BRIGHT ANA CAPPELLUTO</p> <p><i>Adjunct Professor</i> BARBARA MACKAY</p>
Location	<p><i>Loyola Campus</i> TJ Building, Room: 102 Tel.: (514) 848-4747</p>	<p>Fax: (514) 848-4525 E-Mail: theatre@concordia.ca Web Site: http://theatre.concordia.ca</p>
Department Objectives	<p>The Theatre Department offers students an opportunity to explore theatre as an art form and instrument for social and personal change.</p> <p>The program provides students with a basic grounding in design, drama for human development, management, performance, and playwriting, and serves as preparation for advanced studies.</p> <p>The Department welcomes autonomy and personal creativity in its students while encouraging initiative and collaboration. Reflecting the realities of modern theatre, it also prepares students for self-employment and entrepreneurial roles within national and international milieux.</p>	
Programs	<p><i>Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.</i></p> <p><i>The superscript indicates credit value.</i></p>	
	<p>48 BFA Major in Theatre 30 Core studies: DFHD 209³, DFTT 209³, 210³, THEA 211³, 303³, 312³, 404³, PROD 211³, TPER 209³, 210³</p> <p>18 Elective credits from the Department of Theatre (including a minimum of three credits at the 400 level)</p> <p>60 BFA Specialization in Design for the Theatre 30 Core studies: DFHD 209³, DFTT 209³, 210³, THEA 211³, 303³, 312³, 404³, PROD 211³, TPER 209³, 210³</p> <p>9 Chosen from DFTT 311³, 321³, 331³, 498³</p> <p>9 Chosen from DFTT 315³, 325³, 326³, 335³, 336³, 337³, 398³</p> <p>3 THEA 411³</p> <p>9 Elective credits from the Faculty of Fine Arts*</p> <p><i>*Students are advised to select six credits from ARTX 250⁶, 260⁶, 270⁶.</i></p>	<p>12 Elective credits from the Department of Theatre (including a minimum of three credits at the 400 level)</p> <p>60 BFA Specialization in Theatre Performance 30 Core studies: DFHD 209³, DFTT 209³, 210³, THEA 211³, 303³, 312³, 404³, PROD 211³, TPER 209³, 210³</p> <p>18 Chosen from TPER 311³, 312³, 313³, 323³, 345³, 355³, 398³</p> <p>12 Elective credits from the Department of Theatre (including a minimum of three credits at the 400 level)</p> <p>48 BFA Major in Playwriting 30 Core studies: DFHD 209³, DFTT 209³, 210³, THEA 211³, 303³, 312³, 404³, PROD 211³, TPER 209³, 210³</p> <p>15 THEA 241³, 341³, 342³, 420⁶</p> <p>3 THEA 411³</p>
	<p>60 BFA Specialization in Drama for Human Development 30 Core studies: DFHD 209³, DFTT 209³, 210³, THEA 211³, 303³, 312³, 404³, PROD 211³, TPER 209³, 210³</p> <p>18 DFHD 210³, 302³, 303³, 311³, 312³, 421³, 431³, 432³, 498³</p>	<p>24 Minor in Theatre 6 Chosen from THEA 303³, 312³, 404³</p> <p>6 Chosen from PROD 211³, THEA 211³, TPER 201³</p> <p>12 Elective credits from the Department of Theatre</p>

81.120.1
Admission to
Programs in
Theatre

The Department of Theatre has distinct admissions procedures in addition to the normal admission process of Concordia University. All applicants are required to sit for an *interview* and submit a *letter of intent* (approximately 500 words) in which they name specifically to which program they wish to apply: the Major in Theatre, the Minor in Theatre, the Specialization in Drama for Human Development, the Specialization in Design for the Theatre, the Major in Playwriting or the Specialization in Theatre Performance.

Applicants must contact the Department of Theatre in February to arrange their appointments and to obtain detailed information regarding interviews, *auditions*, *portfolios*, and letters of intent.

In addition to the interview and letter of intent:

1. Applicants applying to the Specialization in Design for the Theatre must bring to the interview a portfolio including visual material demonstrating their creative abilities and interests.
2. Applicants applying to the Specialization in Drama for Human Development are required to audition.
3. Applicants applying to the Specialization in Theatre Performance are required to audition.
4. Applicants applying to the Major in Playwriting must send in a portfolio of writing for the stage before their scheduled interview.
5. Applicants applying to the Major in Theatre may choose to audition or to submit a portfolio of materials demonstrating their creative abilities and interests.
6. Applicants applying to the Minor in Theatre are required to attend an interview.

Courses

Theatre:

THEA 211 Script Analysis (3 credits)

Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department. A study of systematic approaches commonly used for the analysis of dramatic scripts. Students will practice analytical skills on a representative selection of plays, including, when appropriate, those slated for production by the Department.

NOTE: Students who have received credit for THEA 240 may not take this course for credit.

THEA 241 Elements of Playwriting
(3 credits)

Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department. Study of and practice in creating the elements of a play. Students will explore different aspects of the writing process, and are expected to submit work of their own on a regular basis for discussion and workshopping within the group.

THEA 303 Theatre History I (3 credits)

A study of the development of the physical stage and representative theoretical and dramatic works within their social context from pre-history to the eighteenth century in Europe. Where appropriate, screenings of plays representing the periods under study are shown. *NOTE A/See §200.3*

THEA 312 Current Canadian Theatre
(3 credits)

A survey of Canadian theatre in the present day, incorporating a study of notable works, outstanding artists and other figures in the arts world and arts organizations. The course will include an analysis of conditions prevailing on the theatre in various regions of the country and will invite students to take stock of their own future in the theatre or elsewhere.

NOTE: Students who have received credit for THEA 403 may not take this course for credit.

THEA 317 Stage Management (3 credits)

Prerequisite: DFHD 209; DFTT 210; PROD 211; THEA 211; TPER 210; or written permission of the Department of Theatre. The key role of a stage manager in theatrical production from audition through closing. Topics for consideration include organizational techniques, prompt-book construction and use, scheduling, personnel supervision, and the "running" of a show.

THEA 321 Theatre Administration I
(3 credits)

An introduction to theatre administration including theatre organization and management, budgeting, box office operation, publicity, and public relations. *NOTE A/See §200.3*

THEA 341 Playwriting I (3 credits)

Prerequisite: THEA 241, or enrolment in a program of the Department of Theatre, or written permission of the Department. A seminar in the writing of plays. Students will concentrate upon a particular genre, length of play, or other prearranged topic, and will submit original scripts for discussion, workshopping, and possible presentation.

THEA 342 Playwriting II (3 credits)

Prerequisite: THEA 241, or enrolment in a program of the Department of Theatre, or written permission of the Department. A seminar in the writing of plays. Students will concentrate upon a particular genre, length of play, or other prearranged topic, and will submit original scripts for discussion, workshopping, and possible presentation. The prearranged topic or genre will be different from that offered in Playwriting I in any one year.

THEA 403 The Theatre in Context
(3 credits)

Prerequisite: Third-year standing* and written permission of the Department of Theatre. An examination of the role of individual artists in shaping the theatre in contemporary society.

The functions and characteristics of the theatre, in a variety of cultural contexts, are examined in discussions and readings. Emphasis is placed on the Canadian theatre and its potential.

**fewer than 66 credits remaining in degree program.*

THEA 404 Theatre History II (3 credits)

Prerequisite: THEA 303 or written permission of the Department of Theatre. A study of the development of the physical stage and representative theoretical and dramatic works within their social context in Europe, the United States, and Canada from the nineteenth century to recent years. Where appropriate, screenings of plays representing the periods and types of works under study are shown.

NOTE: Students who have received credit for THEA 304 may not take this course for credit.

THEA 405 Independent Study I (3 credits)

Prerequisite: Written permission of the Department of Theatre. Credit granted for independent projects supervised by a faculty member. Students are required to submit a paper based on their investigation.

NOTE C/See §200.3

THEA 411 Directing (3 credits)

Prerequisite: Completion of 24 credits of the Core, including DFTT 210 and TPER 210 or written permission of the Department of Theatre. Examination of and experimentation in staging and production organization. Exercises in visual, structural, and conceptual analysis.

NOTE A/See §200.3

THEA 415 Independent Study II (3 credits)

Prerequisite: THEA 405 and written permission of the Department of Theatre. A continuation of THEA 405. Students who have taken THEA 405 register for THEA 415 for additional credits.

THEA 420 Playwriting Workshop
(6 credits)

Prerequisite: Third-year standing* and at least one of THEA 241, 341 or 342 and written permission of the coordinator of the Major in Playwriting; or enrolment in the Major in Playwriting and THEA 241, 341 and 342. A workshop for playwrights, actors, directors, and scenographers in which original scripts are written and workshopped for possible future production. An outcome of an appropriate dimension is a feature of this course.

**fewer than 33 credits remaining to be completed in degree program.*

THEA 422 Theatre Administration II
(3 credits)

Prerequisite: THEA 321 or written permission of the Department of Theatre. A continuation of THEA 321 with additional topics introduced such as financing, contracting, taxation, and touring.

NOTE A/See §200.3

NOTE: Students who have received credit for THEA 322 may not take this course for credit.

THEA 498 Topics in Theatre Studies
(3 credits)

Prerequisite: Written permission of the Department of Theatre. Topics in theatre which may include genres, periods, individual playwrights, and national theatres. *NOTE C/See §200.3*

Design for the Theatre:

DFTT 209 Introduction to Design for the Theatre I (3 credits)

Prerequisite: Permission of the Department of Theatre. An examination of the theatrical design process, including the role of designers in the theatre. Students study and practice the conception, communication, and realization of design ideas in lectures and lab.

NOTE: Students who have received credit for DFTT 250 may not take this course for credit.

DFTT 210 Introduction to Design for the Theatre II (3 credits)

Prerequisite: DFTT 209. A continuation of DFTT 209.

NOTE: Students who have received credit for DFTT 250 may not take this course for credit.

DFTT 305 Independent Study (3 credits)

Prerequisite: Written permission of the Department of Theatre. Credit granted for independent projects in Design for the Theatre supervised by a faculty member.

DFTT 311 Lighting Design (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Lighting design for the theatre with emphasis on conception, development, and communication of lighting design ideas. Students participating in lectures and studios examine theories, aesthetics, and conventions of stage lighting design. They also carry out projects in lighting design conception.

DFTT 315 Lighting Design Realization
(3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Lighting for the stage with emphasis on analysis, development, and execution of lighting design ideas. Students participating in lectures and studios examine lighting as a practical expressive and interpretative media. They carry out projects using stage lighting equipment in an actual theatre space. *NOTE A/See §200.3*

DFTT 321 Costume Design (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Costume design for the theatre with emphasis on imaginative and analytical processes of developing and communicating costuming design ideas. Students, participating in lectures, studios and projects, examine theories, aesthetics, and conventions of stage costume design.

DFTT 325 Costume Design Realization
(3 credits)

Prerequisite: DFTT 209 and 210 or written per-

mission of the Department of Theatre. Materials, equipment, techniques, and procedures utilized in the construction of theatre costumes. Emphasis is on patterning, draping, and basic construction methods.

DFTT 326 *Costume Accessories Realization* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Costuming for the stage with emphasis on analysis, development, and execution of costume design ideas. Students, participating in lectures and studios, examine materials, equipment, and procedures utilized in the realization of costume accessories. They carry out projects in buckram and frame construction for hats, mask-making, and accessory construction. *NOTE A/See §200.3*

DFTT 331 *Set Design* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Set design for the theatre with emphasis on conception, development, and communication of scenic design ideas. Students, participating in lectures and studios, examine theories, aesthetics, and conventions of set design. They also carry out projects in set conception.

DFTT 335 *Set Design Realization* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Stage scenery with emphasis on analysis, development, and execution of scenic design ideas. Students, participating in lectures and studios, examine the process of translating scenic designs into actual stage systems. They carry out projects using the equipment and material commonly used in set construction.

DFTT 336 *Stage Properties* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Studio work in the design and construction of properties and accessories for theatre production.

DFTT 337 *Scene Painting* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Studio work in the materials and technology of painting for the theatre. *NOTE A/See §200.3*

DFTT 398 *Special Topics in Design for the Theatre* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Selected topics in design realization. *NOTE C/See §200.3*

DFTT 414 *Advanced Projects in Design for the Theatre* (3 credits)

Prerequisite: Third-year standing* in the Specialization in Design for the Theatre and written permission of the Theatre. Students complete major assignments in design or

realization for the Department of Theatre productions. *NOTE A/See §200.3*
**fewer than 33 credits remaining in degree program.*

DFTT 451 *Designers in the Theatre I* (3 credits)

Prerequisite: Third-year standing* in the Specialization in Design for the Theatre or written permission of the Department of Theatre. An advanced study of the role of designers in the contemporary theatre. Students participate in discussions concerning the theories, aesthetics, conventions, and standards of the Canadian theatrical design community. Research is carried out with, and about important figures in the Canadian theatre. Students also assemble a body of their design work indicative of their imagination, experiences, and understandings of the theatre. *NOTE A/See §200.3*
**fewer than 33 credits remaining in degree program.*

DFTT 452 *Designers in the Theatre II* (3 credits)

Prerequisite: DFTT 451. A continuation for DFTT 451. *NOTE A/See §200.3*

DFTT 498 *Special Topics in Design for the Theatre* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Selected topics in theatre design. *NOTE C/See §200.3*

Drama for Human Development:

DFHD 209 *Drama for Human Development: Personal* (3 credits)

Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department. Theory and practice of drama for human development, with an emphasis on personal or individual development. Opportunities are provided for practical work in the creation of original narratives and improvised role plays, as well as sensory and image work. The dynamics and creative processes characteristic of human growth are examined, as are developmental models.

NOTE: Students who have received credit for DINE 200 may not take this course for credit.

DFHD 210 *Drama for Human Development: Social* (3 credits)

Prerequisite: DFHD 209. An exploration of drama for human development within group or social environments, such as schools and other institutional settings. Learning theories will be examined as they pertain to human development, and opportunities centred on themes such as myth or poetry will be provided for practical work in group collaborative processes and the exploration of social issues through drama.

NOTE: Students who have received credit for DINE 200 may not take this course for credit.

DFHD 302 *Drama for Special Populations*
(3 credits)

Prerequisite: DFHD 209 or written permission of the Department of Theatre. Design and preparation of appropriate drama or theatre activities for individuals with special needs in schools or community and institutional settings. Topics include specialized teaching strategies, activity planning, special needs assessment, classroom or workshop management and self-evaluation.
NOTE: Students who have received credit for DINE 302 may not take this course for credit.

DFHD 303 *Stories and Storytelling*
(3 credits)

Prerequisite: DFHD 209 or written permission of the Department of Theatre. This course focuses on the development of the participants' skills in reading and telling stories, on the creation and evaluation of new stories, on methods of using literature as a basis for dramatic play.
NOTE: Students who have received credit for DINE 303 may not take this course for credit.

DFHD 311 *Popular Theatre: Theory and Practice* (3 credits)

Prerequisite: DFHD 209 or written permission of the Department of Theatre. An examination of the principles on which popular theatre is based, including objectives, approaches, and evaluation. The course will provide an overview of the work of various founders (e.g. Freire, Boal), as well as pertinent theatre companies around the world engaged in social activism and the creation of opportunities for social change. Topics are approached through a mix of academic studies and the practice of specific techniques. Students may also prepare a work of popular theatre.
NOTE: Students who have received credit for this topic under a DINE 498 number may not take this course for credit.

DFHD 312 *Theatre for Young Audiences*
(3 credits)

Prerequisite: DFHD 209 or written permission of the Department of Theatre. An overview of theatre for young audiences, from both national and international perspectives. Projects may include reading representative scripts, exploring various performance styles and staging techniques, and preparing a short piece of theatre for young audiences in a particular genre.
NOTE: Students who have received credit for DINE 412 or 413 may not take this course for credit.

DFHD 405 *Independent Study I* (3 credits)

Prerequisite: Third-year standing* and written permission of the Department of Theatre. Credit granted for independent projects in Drama for Human Development supervised by a faculty member.

**fewer than 33 credits remaining in degree program.*

NOTE: Students who have received credit for DINE 405 may not take this course for credit.

DFHD 415 *Independent Study II* (3 credits)

Prerequisite: Third-year standing* and written permission of the Department of Theatre. A continuation of DFHD 405. Students who have taken DFHD 405 register for DFHD 415 for additional credits.

**fewer than 33 credits remaining in degree program.*

NOTE: Students who have received credit for DINE 415 may not take this course for credit.

DFHD 421 *An Introduction to Drama Therapy* (3 credits)

Prerequisite: DFHD 302 or written permission of the Department of Theatre. An introduction to the theory and practice of drama therapy, including grounding in psychology pertinent to the field. Lectures and workshops in which students examine the philosophical and historical foundations of drama and theatre in therapy.
NOTE: Students who have received credit for DINE 420 may not take this course for credit.

DFHD 431 *Special Projects in Drama for Human Development I*
(3 credits)

Prerequisite: Enrolment in Drama for Human Development Specialization and DFHD 302, or written permission of the coordinator of Drama for Human Development. An lecture/lab in observing, evaluating, planning and implementing drama curricula in various locations such as inner-city schools, prisons, homes for the elderly, and women's shelters. Students shall engage in wide-ranging and intensive fieldwork in various placements, reporting back to classmates and receiving lectures, feedback and observations on their progress from the instructor of the course.

DFHD 432 *Special Projects in Drama for Human Development II*
(3 credits)

Prerequisite: DFHD 431. Continuation of DFHD 431 with a different topic.

DFHD 498 *Special Topics in Drama for Human Development* (3 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of Drama for Human Development.

Drama in Education:

DINE 401 *Supervised Internship — Elementary Level* (3 credits)

Prerequisite: Written permission of the Department of Theatre. Students teach a curriculum unit which uses drama methods in an elementary setting. Students are supervised and their teaching performance is evaluated on selected criteria related to teaching competence and professional behaviour.

DINE 402 *Supervised Internship — Secondary Level* (3 credits)

Prerequisite: Written permission of the Depart-

ment of Theatre. Students teach a curriculum unit in creative drama or theatre arts at the secondary level. Students are supervised and their teaching performance is evaluated on selected criteria related to teaching competence and professional behaviour.

DINE 412 *Introduction to Theatre for Young Audiences* (3 credits)

Prerequisite: DINE 200 or written permission of the Department of Theatre. The history of theatre for young audiences in the twentieth century, including readings of representative scripts, a study of various performance styles, and an examination of the relationship of style and content to changing cultural views of children. *NOTE A/See §200.3*

DINE 413 *Theatre for Young Audiences: Production* (3 credits)

Prerequisite: Enrolment in the Specialization in Drama in Education or audition and written permission of the Department of Theatre. Research and practical work in the collaborative process of developing theatre for young audiences. *NOTE A/See §200.3*

Production:

NOTE: Conditions of access to courses and scheduling:

1. All assignments or roles are given after interview or audition.
2. Before registering for Production courses, students must make sure they are free to attend all rehearsals or crew calls according to the schedules published each session by the Department of Theatre.
3. Students may not register for more than one course in Production during the same semester.

PROD 211 *Introduction to Theatre Production* (3 credits)

Prerequisite: Enrolment in a program of the Department of Theatre or permission of the Department. A survey of selected operations central to production in the professional theatre. Students are assigned to various crews associated with departmental productions.

NOTE: Students who have received credit for THEA 240 may not take this course for credit.

PROD 311 *Theatre Production I* (3 credits)

Prerequisite: DFHD 209; DFTT 209, 210; FFAR 250; THEA 211; TPER 209, 210; PROD 211; concurrent registration in six credits of courses outside the Faculty of Fine Arts, and written permission of the Department of Theatre. Participation in a theatre production prepared under the auspices of the Department of Theatre and presented to an audience. The systematic preparation for the presentation of the work requires the integration of scholarly, imaginative and organizational activities under the supervision of instructors and staff acting either as part of the creative team or as guides and members of an adjudicating panel.

PROD 312 *Theatre Production II* (3 credits)

Prerequisite: PROD 311 and written permission of the Department of Theatre. A continuation of PROD 311 in an intensive format, requiring extensive work of a different type or level of complexity, or demanding a higher degree of proficiency.

PROD 315 *Production A* (6 credits)

Prerequisite: PROD 311 and written permission of the Department of Theatre. A continuation of PROD 311 in an intensive format, requiring extensive work of a different type or level of complexity, or demanding a higher degree of proficiency.

PROD 408 *Supervised Internship I* (3 credits)

Prerequisite: Second-year standing* and written permission of the Department of Theatre. An opportunity for students to obtain credit for work completed for a recognized theatre under the joint supervision of a qualified professional and a full-time Theatre faculty member.

NOTE C/See §200.3

**fewer than 66 credits remaining in degree program.*

PROD 409 *Supervised Internship II* (3 credits)

Prerequisite: PROD 408 and written permission of the Department of Theatre. A continuation of PROD 408. A student repeating PROD 408 register for PROD 409 for credit.

PROD 411 *Theatre Production III* (3 credits)

Prerequisite: PROD 311 or 315; FFAR 250; six credits in courses outside the Faculty of Fine Arts and concurrent registration in another six in courses outside the Faculty and written permission of the Department of Theatre. Advanced assignments in the various areas of theatre.

PROD 412 *Theatre Production IV* (3 credits)

Prerequisite: PROD 411 and written permission of the Department of Theatre. A continuation of PROD 411, with assignments of a different type, degree of complexity, or demanding a higher degree of proficiency.

PROD 413 *Theatre Production V* (3 credits)

Prerequisite: PROD 412 or written permission of the Department of Theatre. Students in a Mature level or an Extended Credit Program repeating PROD 412 register for credit under PROD 413.

PROD 414 *Theatre Production VI* (3 credits)

Prerequisite: PROD 413 or written permission of the Department of Theatre. Students in a Mature level or an Extended Credit Program repeating PROD 413 register for credit under PROD 414.

PROD 415 *Production B* (6 credits)
Prerequisite: PROD 312 or 315 or 411, six credits in courses outside the Faculty of Fine Arts and concurrent registration in another six credits in courses outside the Faculty and written permission of the Department of Theatre. Extensive assignments, requiring intensive work in various areas of advanced theatre work.

PROD 416 *Production C* (6 credits)
Prerequisite: Third-year standing, PROD 416, six credits in courses outside the Faculty of Fine Arts and concurrent registration in another six credits in courses outside the Faculty and written permission of the Department of Theatre. Extensive assignments, requiring intensive work in various areas of advanced theatre work.

Theatre Performance:

TPER 201 *Introduction to Acting*
(3 credits)
Emphasis on developing imagination and physical expression, including basics of improvisation, the playing of intention, and the group ensemble experience working towards presentation.
NOTE: Students enrolled in a Major or Specialization program in the Department of Theatre may not take this course for credit.

TPER 209 *Acting I* (3 credits)
Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department of Theatre. An introduction to the basic principles of the acting process. Areas of study include: sensory awareness, physical and vocal expression of image and intention, improvisation exercises focusing on the development of the actor's imagination, concentration, and ensemble playing. The emphasis is upon the process of making connections to images and listening to others in the theatrical space.

TPER 210 *Acting II* (3 credits)
Prerequisite: TPER 209. A continuation of TPER 209 with increased emphasis on language and text. The principles learned in the previous course will be applied to dramatic text including text analysis for the actor.

TPER 216 *Voice Studio II* (3 credits)
Prerequisite: TPER 215 and TPER 210 concurrently (or 212 before September 1998). A continuation of TPER 215.
NOTE: Students are expected to bear certain costs in relation to this course.

TPER 301 *Voice, Movement and Acting Ila* (3 credits)
Prerequisite: TPER 200. Students read, analyse text, and begin exploring characterization. Exercises in movement and text encourage development of the voice and body. Regular études are presented and critiqued.
NOTE: Students who have completed 12 or more credits of Theatre Performance courses

may not take this course for credit.
NOTE: Students who have received credit for TPER 300 may not take this course for credit.

TPER 302 *Voice, Movement and Acting Ilb* (3 credits)
Prerequisite: TPER 301. A continuation of TPER 301.
NOTE: Students who have received credit for TPER 300 may not take this course for credit.

TPER 311 *Character and Text* (3 credits)
Prerequisite: TPER 210 (or 212 before September 1998) and written permission of the Department of Theatre. Principles of characterization in various dramatic genre: elements of rhythm, physical and vocal attitude, language, and related improvisation techniques.

TPER 312 *Acting Elizabethan Text*
(3 credits)
Prerequisite: TPER 210 (or 212 before September 1998) and written permission of the Department of Theatre. Analysis of Elizabethan text and application of acting principles to the demands of verse forms.

TPER 313 *Theatre Movement I* (3 credits)
Prerequisite: TPER 210 (or 212 before September 1998). Movement for the stage including such areas of study as centering, relaxation, mime, neutral mask, and studies in rhythm and timing.
NOTE: Students who have received credit for TPER 213 may not take this course for credit.

TPER 315 *Voice Studio III* (3 credits)
Prerequisite: TPER 216, TPER 311 concurrently, and written permission of the Department of Theatre. A continuation of TPER 216 with greater emphasis on shaping patterns of speech, use of language for character development, and an introduction of dialects and accents. Private tutorial dealing with specific elements of speech and voice for the performer is included.
NOTE: Students are expected to bear certain costs for this course.

TPER 316 *Voice Studio IV* (3 credits)
Prerequisite: TPER 315, TPER 312 concurrently. A continuation of TPER 315.
NOTE: Students are expected to bear certain costs for this course.

TPER 323 *Theatre Movement II* (3 credits)
Prerequisite: TPER 313 and written permission of the Department of Theatre. Approaching character through the use of mask. The study of movement and voice aspects of character are approached through the use of half-masks. Improvisation skills are further developed.

TPER 325 *Acting Styles* (3 credits)
Prerequisite: TPER 210 (or 212 before September 1998) and written permission of the Department of Theatre. This course focuses on

acting styles as they relate to audience-performer relationships in dramatic genre and periods.

NOTE: Students who have received credit for TPER 411 may not take this course for credit.

TPER 333 *Special Performance Studies I*
(3 credits)

Prerequisite: TPER 210 (or 212 before September 1998) and written permission of the Department of Theatre. The study of special performance techniques such as musical theatre, clown, *Commedia dell'Arte*, and mime.

NOTE: Students who have received credit for TPER 413 may not take this course for credit.

TPER 345 *Voice and Speech I* (3 credits)

Prerequisite: TPER 210 (or 212 before September 1998) and written permission of the Department of Theatre. An introduction to voice, speech, and singing skills. Vocal production, articulation, phrasing, and language analysis are taught in studio and laboratory sessions.

NOTE: Students who have received credit for TPER 215 may not take this course for credit.

TPER 355 *Voice and Speech II* (3 credits)

Prerequisite: TPER 345 and written permission of the Department of Theatre. A continuation of TPER 345 with greater emphasis on shaping patterns of speech, use of language for character development.

NOTE: Students who have received credit for TPER 315 may not take this course for credit.

TPER 398 *Special Topics in Theatre Performance* (3 credits)

Prerequisite: Written permission of the Department of Theatre. Provides opportunities for studies in selected styles or modes of theatre performance. *NOTE C/See §200.3*

TPER 401 *Voice, Movement and Acting IIIa* (3 credits)

Prerequisite: TPER 302 and written permission of the Department of Theatre. Students explore realistic and/or classical styles in acting. Projects may be drawn from historical and contemporary sources. Regular études are presented and critiqued.

NOTE: Students who have received credit for TPER 400 may not take this course for credit.

TPER 402 *Voice, Movement and Acting IIIb* (3 credits)

Prerequisite: TPER 401 and written permission of the Department of Theatre. A continuation of TPER 401.

NOTE: Students who have received credit for TPER 400 may not take this course for credit.

TPER 411 *Ensemble V* (3 credits)

Prerequisite: TPER 312, 323, or written permission of the Department of Theatre. A continuation of TPER 312. Focuses on acting styles as they relate to audience-performer relationships in dramatic genre and periods.

TPER 412 *Ensemble VI* (3 credits)

Prerequisite: TPER 411 or written permission of the Department of Theatre. A continuation of TPER 411.

TPER 413 *Advanced Performance Studies I* (3 credits)

Prerequisite: TPER 323 or written permission of the Department of Theatre. The study of special performance techniques such as musical theatre, clown, *Commedia dell'Arte*, and mime.

NOTE A/See §200.3

NOTE: Students are expected to bear certain costs in relation to this course.

TPER 414 *Advanced Performance Studies II* (3 credits)

Prerequisite: TPER 316 or written permission of the Department of Theatre. The study of advanced voice and speech techniques.

NOTE: Students are expected to bear certain costs in relation to this course.

TPER 417 *Audition and Résumé Preparation* (3 credits)

Prerequisite: Third-year standing* in the Specialization in Theatre Performance or in a Department of Theatre program and written permission of the Department of Theatre.

Techniques for auditioning, preparation of résumé, and the business aspects of the performer's work in the professional theatre.

**fewer than 33 credits remaining in degree program.*



faculty

section

100

100 FACULTY

Faculty Full-Time

- ABOU-ZEID, El Sayed, BSc Alexandria, BSc Military Tech. Coll., Cairo, MSc PhD Alexandria, Decision Sciences and Management Information Systems
- ABOUD, Brian, BA U.Q.A.M., PhD A.N.U., Sociology and Anthropology
- ABRAMI, Philip, BA Bard Coll., MA PhD Manit., Education
- ACHESON, Palmer, BA Lond., MBA U.Q.A.M., MS PhD Indiana, TESL (Applied Linguistics)
- ACLAND, C. Derek, BComm MBA Qu., PhD N. Carolina, CA, Accountancy
- ACLAND, Charles Reid, BComm Car., PhD Illinois, Communication Studies
- ACLAND, Joan, BA Car., MA PhD C'dia, Art History
- ADAMS, Liselyn, BMus Boston, PhD Royal Conserv., The Hague, Music
- AGARWAL, Anjali, BE Delhi, MSc Calg., PhD C'dia, Electrical and Computer Engineering
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- STASESON, Rae, BFA *Regina*, MFA *Rutgers, Communication Studies*
- STATHOPOULOS, Theodore, DipEng *Athens*, MSc PhD *W. Ont.*, PEng *Ont.*, *Building, Civil and Environmental Engineering*
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- STEWART, Jane, BA *Qu.*, PhD *Lond.*, *Psychology*
- STIHARU, Ion, BA *Bucharest*, MEng PhD *Politech. Inst. Bucharest, Mechanical Engineering*
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- STORMS, Reginald K., BSc PhD *Alta.*, *Biology*
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- SUEN, Ching Y., BScEng MScEng *H.K.*, MSc PhD *Br. Col.*, *Computer Science*
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- TAHAR, Sofiene, BSc MSc *Darmstadt*, PhD *Karlsruhe, Electrical and Computer Engineering*
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- TAMAS, Steven, BA *C'dia*, CGA, *Accountancy*
- TANGUAY, Denise, BA BSc *Ott.*, MA *C'dia, Arts Therapies*
- TAO, Lixin, BSc *Nanjing*, MSc PhD *Penn.*, *Computer Science*
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- TAYLOR, Marilyn, BA *Sask.*, MA *Wis.*, PhD *Tor.*, *Applied Human Sciences*
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- THORNTON, Patricia A., MA PhD *Aberd.*, *Geography*
- THWAITES, Hal, BA *Loyola*, MA *C'dia, Communication Studies*
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- TITTLER, Robert, BA *Oberlin Coll.*, MA PhD *N.Y.*, *History*
- TOMBERLIN, Jerry, BSc *Flor.*, MSc *Mich.*, PhD *Harv.*, *Decision Sciences and Management Information Systems*
- TREMBLAY, Reeta C., BA MA *Kashmir*, MPhil *J. Nehru*, MA PhD *Chic.*, *Political Science*
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- VAN NUS, Walter, BA MA PhD *Tor.*, *History*
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BIEN, Linda, DipArt *Cooper Union for Advancement of A. & S.*, BS *Col., MS L.I.U., Slide Librarian, Fine Arts (Art History Slide Library)*

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BREIER, Susie, BA *C'dia*, MLIS *McG., Assistant Systems Librarian*

CAMERON, Dorothy, BA *BLS McG., Reference/Librarian (Webster)*

CARPENTIER, Louise, BA *Laval*, BLS *Tor.*, MBibI *Montr.*, MA *C'dia, Head, Government Information Services*

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ABDUL-HALEM, Ramzi A., <i>Electrical and</i> <i>Computer Engineering</i>	ASTENGO, Francesca, <i>Political Science</i>
ABI-AAD, Rony, <i>Computer Science</i>	AUCLAIR, Myra, <i>Classics, Modern Languages</i> <i>and Linguistics</i>
ABI-NADER, Georges, <i>Physics</i>	AYADI, Mohamed, <i>Finance</i>
ABRAN, Henri, <i>Études françaises</i>	BABINEAU, Dan, <i>Communication Studies</i>
ADJAMI, Carl, <i>Accountancy</i>	BALKIR, Ibrahim, <i>Accountancy</i>
AHARONIAN, Lara, <i>Études françaises</i>	BANERJI, Sanjay, <i>Finance</i>
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AL-ATRAQCHI, Leila, <i>Sociology and</i> <i>Anthropology</i>	BARCLAY, Barbara A., <i>Teaching of English as</i> <i>a Second Language</i>
AL-KHABYYR, Muhammad Abdul, <i>Music</i>	BARKER, Leslie, <i>Exercise Science</i>
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ALHASSAN, Amin Mohammed, <i>Communication</i> <i>Studies</i>	BEAUDET, Richard, <i>Music</i>
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ANDERSON, Hugh, <i>Journalism</i>	BÉRARD, Michael, <i>Music</i>
ANDERSON, Matthew, <i>Theological Studies</i>	BEREZOWSKY, Liliana, <i>Studio Arts</i>
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	BODYCOMB, Venetia, <i>Geography</i>

BOGARDI, George, *Studio Arts*
 BOISVERT, Donald, *Political Science*
 BOIVIN, Caroline, *Economics*
 BOLAND-DUCHAMP, Theodora, *Art Education and Art Therapy*
 BOLDUC, Rémi, *Music*
 BONNEVILLE, Lucie, *Psychology*
 BORSA, Joan M., *Art History*
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 BOUCHARD-ULUSOY, Diane, *Études françaises*
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 BRANSWELL, Michael J., *Journalism*
 BREUER, Robert Elliot, *Études françaises*
 BRIMO, Elizabeth L., *Education*
 BRISCOE, Ken, *Communication Studies*
 BROCK, Andrew, *English*
 BROOKS, Christopher, *Geography*
 BROWN, Benson, *Mathematics and Statistics*
 BROWN, Nancy L., *Teaching of English as a Second Language*
 BROWNE, Meredith, *Sociology and Anthropology*
 BUCHANAN, Craig, *Computer Science*
 BUTLER, Deidre, *Simone de Beauvoir Institute*

 CABREJO, Pedro, *Decision Sciences and Management Information Systems*
 CALDERONI, Sylvie, *Classics, Modern Languages and Linguistics*
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 CAMPBELL, Howard John, *Management*
 CAMPBELL, Robert, *Accountancy*
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 CAUVIN, Marie H., *Studio Arts*
 CHALIFOUX, Lisa M., *Education*
 CHAMANADJIAN, Lucia, *Classics, Modern Languages and Linguistics*
 CHAN, Germaine, *Accountancy*
 CHAN, Soukwan, *Geography*
 CHARRON, Raymond, *Communication Studies*
 CHAVERDIAN, Gregory, *Music*
 CHEASLEY, Elaine, *Art History*
 CHECHILE, Michael, *Education*
 CHEN, Su, *Electrical and Computer Engineering*
 CHEW, Dolores, *History*
 CHIMNI, Ravinder S., *Political Science*
 CHIOPAN, Scott, *Teaching of English as a Second Language*
 CHOQUETTE, Michel, *English*
 CHUPRUN, Ian, *Music*
 CIPRIANO, Mary Ann, *Marketing*
 CLARINI, Janice, *Sociology and Anthropology*

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 CLARK, David, *Music*
 CLARKE, Jocelyne, *Cinema*
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 CLEMENT, Samuel B., *Management*
 COBB, Thomas, *Teaching of English as a Second Language*
 COHEN, Leslie, *Psychology*
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 COLLARD, Remi, *Music*
 COLLINS, Robert, *Political Science*
 COLPRON, Francis, *Music*
 COMTOIS, Alain, *Exercise Science*
 CONNOLLY, John, *Marketing*
 CONTOGIORGIS, Margaret, *Classics, Modern Languages and Linguistics*
 CONTRERAS, Rosa, *Classics, Modern Languages and Linguistics*
 COOK, Iain D., *Communication Studies*
 COONEY, Peter, *Journalism*
 CORMAN, Don, *Design Art*
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 COWAN, Laura, *Teaching of English as a Second Language*
 COX, Kirwan, *Communication Studies*
 CRICHTON, Pearl, *Sociology and Anthropology*
 CRISALLI, Anthony, *Mathematics and Statistics*
 CROOKS, Frank, *Management*
 CROSS, Roy, *Communication Studies*
 CROZIER, Stephen, *Teaching of English as a Second Language*
 CRUICKSHANK, Lyle, *Marketing*
 CZAPIEWSKI, Jacek, *Design Art*

 DAIGLE, Christine, *Philosophy*
 DALFEN, Karen, *Applied Human Sciences*
 DANIAL, Mary, *Electrical and Computer Engineering*
 DANINGBURG, Suzanne, *Education*
 DANIS, Jean-Claude, *Political Science*
 DARDICK, Simon, *English*
 DARIER, Eric, *Political Science*
 DAS, Susil K., *Electrical and Computer Engineering*
 DAUBNER, Ernestine, *Art History*
 DAVIES, Howard, *Design Art*
 DAVIS, Donald, *Electrical and Computer Engineering*
 DAVIS, Mary-Ellen, *Cinema*
 DAYE, Russell, *Religion*
 DE AGUAYO, Anna, *Sociology and Anthropology*
 DE FREITAS, Jennifer, *Design Art*
 DE GRACE, Lynn, *Accountancy*
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2000 Retirements	GOLLNER, Andrew B., BA Loyola, MA Car., PhD Lond. Sch. of Econ., <i>Political Science</i>	SHEININ, Rose, PhD Tor., DSc Acad., DHumLett Mt. St. Vin., <i>Biology</i>
	GRAY, Thomas, BA MA McM., PhD S. Fraser, <i>Psychology</i>	SZAMOSI, Geza, DSc Hungarian Acad. of Sciences, PhD Bud., <i>Science College</i>
	HERMAN, André, BA Polish State Film & Theatre Acad., Professional Dip Inst. des Hautes Études Cinématographiques, Paris, <i>Cinema</i>	TEE, Oswald S., BSc Leic., MSc McM., PhD E. Anglia, <i>Chemistry and Biochemistry</i>
	LONG, Robert A., BComm Br. Col., MBA Wash., CA, <i>Accountancy</i>	

1999 Retirements	BERTRAND, Charles L., BA <i>Western Wash., MA Ore.</i> , PhD <i>Wis., History</i>	PECHTER, Edward, BA <i>Cornell</i> , MA PhD <i>Calif. (Berkeley)</i> , <i>English</i>
	BRENDER, William J., BA MSc PhD <i>McG., Psychology</i>	PHILMUS, Robert M., BA <i>Brown</i> , PhD <i>Calif. (San Diego)</i> , <i>English</i>
	HILL, Harry J.C., MA <i>Aberd.</i> , <i>English</i>	SEN, Joya, BA <i>Calc.</i> , MA <i>Jad.</i> , MA PhD <i>Tor.</i> , <i>Management</i>
	JANOWITZ, Tilly, BA MA <i>Prague</i> , <i>Communication Studies</i>	SERPONE, Nick, BSc <i>Sir G. Wms.</i> , PhD <i>Cornell</i> , <i>Chemistry and Biochemistry</i>
	McDEVITT, Robert S., <i>Journalism</i>	
	MOORE, James W., BA <i>Car.</i> , MA <i>Tor.</i> , <i>Political Science</i>	
1998 Retirements	ANDERSON, Perry D., BA MSc <i>W. Ont.</i> , PhD <i>Ore. State</i> , <i>Biology</i>	KOVATS, Thomas A., BSc <i>Georgetown</i> , PhD <i>Johns H.</i> , <i>Communication Studies</i>
	CAWLEY, Richard, BA <i>Manit.</i> , MS <i>Flor.</i> , EdD <i>Tor.</i> , <i>Applied Human Sciences</i>	KRAUSE, Jerome C., BFA <i>Layton Sch. of Art</i> , MFA <i>Cranbrook Acad. of Art</i> , <i>Studio Arts</i>
	COHEN, Maurice, BSc <i>McG.</i> , PhD <i>Calif. (Berkeley)</i> , <i>Mathematics and Statistics</i>	LOSIQUE, Serge, LèSL DES DU <i>Paris</i> , <i>Études françaises</i>
	COLEBROOK, Lawrence D., BSc MSc PhD <i>Auck.</i> , <i>Chemistry and Biochemistry</i>	POTEET, Lewis J., AB <i>Bethany Nazarene</i> , MA <i>Okla.</i> , PhD <i>Minn.</i> , <i>English</i>
	DHAWAN, Kailash C., BA MA <i>Panj.(I)</i> , MBA <i>Ore.</i> , PhD <i>N.Y.</i> , <i>Marketing and International Business</i>	SBROCCHI, Frank L., MBA <i>W. Ont.</i> , PhD <i>C'dia</i> , <i>RIA/CMA</i> , <i>Accountancy</i>
	GEDDES, Gary, BA <i>Br. Col.</i> , MA PhD <i>Tor.</i> , <i>English</i>	THULASIRAMAN, Krishnaiyan, BE MSc <i>Madr.</i> , PhD <i>I.I.T. Madras</i> , <i>Electrical and Computer Engineering</i>
	GRACOVETSKY, Serge A., Eng(Physics) <i>Lausanne</i> , PhD <i>Br. Col.</i> , <i>Electrical and Computer Engineering</i>	TRESIERRA, Julio, BA <i>Catholic</i> , <i>Lima, Peru</i> , MA PhD <i>Notre Dame (Ind.)</i> , <i>Sociology and Anthropology</i>
	HUBBARD, William H., BA <i>Ore.</i> , MA PhD <i>Col.</i> , <i>History</i>	UPSHUR, John A., BA <i>Yale</i> , MA PhD <i>Mich.</i> , <i>TESL (Applied Linguistics)</i>
	KIPLING, Arlin L., BEng <i>Sask.</i> , MSc <i>McG.</i> , PhD <i>Exe.</i> , <i>Physics</i>	VASIL, Alex, BComm <i>LA McG.</i> , <i>CA</i> , <i>Accountancy</i>
	KOMODA, Melvin K., BA MA <i>Hawaii</i> , PhD <i>York (Can.)</i> , <i>Psychology</i>	WISE, Roy A., BA MA <i>Calif. State</i> , PhD <i>McG.</i> , <i>Psychology</i>
1997 Retirements	ANAND, Kailash K., BA <i>Punj.</i> , MA <i>Delhi</i> , PhD <i>N.Y.</i> , <i>Mathematics and Statistics</i>	CRAWFORD, Ronald L., BA MA PhD <i>Yale</i> , <i>Management</i>
	AUCHINACHIE, Gerald M., BA <i>Br. Col.</i> , MA <i>Tor.</i> , PhD <i>Montr.</i> , <i>English</i>	CRYSLER, Lindsay, <i>Journalism</i>
	BALDWIN, Mary E., BSc MSc <i>Tas.</i> , SM <i>Harv.</i> , <i>Chemistry and Biochemistry</i>	DHINDSA, Kuldip S., BSc MSc <i>Panj.</i> , PhD <i>Helsinki</i> , <i>Biology</i>
	BARTON, Charles R., BA MA <i>Yale</i> , PhD <i>N.Y.</i> , <i>Linguistics</i>	DRYSDALE, John P., BA <i>Millsaps</i> , MA PhD <i>Louisiana State</i> , <i>Sociology</i>
	BELINSKY, Moishe M., BSc MSc <i>McG.</i> , PhD <i>Montr.</i> , <i>Mathematics and Statistics</i>	DUBAS, Rev. M. Stephen, s.j., BSc MSc(Eng) <i>Alta.</i> , PhL PhD <i>St. Louis</i> , MDiv <i>St. M. U.</i> , <i>Physics</i>
	BELMORE, Nancy, AB <i>Randolph-Macon</i> , MS PhD <i>Georgetown</i> , <i>TESL (Applied Linguistics)</i>	DWIVEDI, Tryambkeshwar D., BSc <i>Ban.</i> , MSc <i>Gorak.</i> , MSc PhD <i>Ott.</i> , <i>Mathematics and Statistics</i>
	BHATNAGAR, Jitendra K., BSc LLB <i>Agra</i> , MA PhD <i>Lond.</i> , <i>Education</i>	EDDY, Nelson W., BA <i>McM.</i> , MSc <i>Mass.</i> , PhD <i>Arizona</i> , <i>Physics</i>
	BOTTENBERG, Wolfgang, BMus <i>Edmonton</i> , MMus DMA <i>Cinc.</i> , <i>Music</i>	ENOS, Edmund F., BSc <i>Conn.</i> , MEd EdD <i>Boston</i> , <i>Exercise Science</i>
	BRETON, Gabriel, BA <i>Manit.</i> , MA <i>Montr.</i> , PhD <i>Mich.</i> , <i>Psychology</i>	FINK, Howard R., MA <i>McG.</i> , PhD <i>Lond.</i> , <i>English</i>
	BRIAN, Mary A., BA <i>Tor.</i> , MA <i>Bryn-Mawr</i> , <i>Mathematics and Statistics</i>	FOX, John, Dip Art & Des <i>Art Assoc. of Montr.</i> , Dip <i>Slade Sch. of Fine Art</i> , <i>Lond.</i> , <i>Studio Arts</i>
	BROES, Arthur, BA <i>Manhattan Coll.</i> , MA <i>Col.</i> , PhD <i>Pitt.</i> , <i>English</i>	FRIEDLAND, Sherman, BM <i>N.E. Conserv. of Music</i> , MM <i>Mass.</i> , <i>Music</i>
	BROWN, Daniel, AB <i>Xavier</i> , DPhil <i>Tübingen</i> , <i>Classics</i>	GABRIEL-LACKI, Christopher, BA <i>Coll. Militaire</i> , <i>Courtine</i> , <i>Design Art</i>
	CATRY-VERRON, Marthe J., BA <i>Lille</i> , MA <i>Mt. Holyoke</i> , <i>Études françaises</i>	GEORGE, Hardy, BA <i>Texas Christian</i> , MA <i>Calif.</i> , PhD <i>Lond.</i> , <i>Art History</i>
	CHENG, Richard M.H., BSc Eng <i>H.K.</i> , MSc <i>Manc.</i> , PhD <i>Birm.</i> , <i>Mechanical Engineering</i>	GIBSON, Thomas, <i>Studio Arts</i>
		GILSDORF, William, BA <i>Baldwin-Wallace</i> , MA <i>Bowling Green</i> , PhD <i>Mich.</i> , <i>Communication Studies</i>

GINTER, Donald E., BA MA *Stan.*, PhD *Calif.*,
History
GORDON, Russell, BFA *Temple*, MS MFA *Wis.*,
Studio Arts
HABIB, Henry P., BA *Amer. of Beirut*, MA
Fordham, PhD *McG.*, *Political*
Science
HAMLET, Zacharias, BSc *Madr.*, MSc *Agra*,
PhD *Notre Dame*, *Chemistry and*
Biochemistry
HENRIK, Elizabeth, BA MA *Sir G. Wms.*, PhD
Tulane, *Psychology*
HERRMANN, Klaus J., BA MA PhD *Minn.*,
Political Science
HOECKER-DRYSDALE, E. Susan, BA
Northland Coll., *Ashland*, MA PhD
Louisiana State, *Sociology*
HOOPER, W. Ronald, BA PhD *Tor.*, *Psychology*
HUDSON, Susan, *Design Art*
IBRAHIM, Ragai K., BSc *Cairo*, MSc
Alexandria, PhD *McG.*, *Biology*
JAWORSKI, Wojciech M., Inz MTechSc
Politechnika Warszawska, DMath
Polish Acad. of Sciences, Math Inst.
of Warsaw, *Computer Science*
JENKINS, John T., BSc MSc *McG.*, *Geology*
KELLY, Joe, BSc MEd *Glas.*, PhD *Strath.*,
Management
KIRPALANI, V.H. Manek, BA *Bom.*, MA *Oxf.*,
DSc *Montr.*, *Marketing, and*
International Business
KREPEC, Tadeusz H., Eng MTSc DTSc
Polytech. of Warsaw, Ing,
Mechanical Engineering
LANGLEY, Elizabeth, *Contemporary Dance*
LEVY, David, Lèsl *Bordeaux*, DES *Montr.*, Doct
IIIème Cycle *Paris*, *Études françaises*
L'HÉRAULT, Pierre, BA *Laval*, BTh *Montr.*, MTh
Ott., MA PhD *McG.*, *Études françaises*
MALIK, Mohammad A., MSc *Alig.*, PhD *Montr.*,
Mathematics and Statistics
MARKLAND, E. Brian, BComm *Sir G. Wms.*,
MBA *Mich. State*, CA, *Accountancy*
MASON, Michael, BA *Br. Col.*, PhD *Birm.*, *History*
MILLER, David M., BA *Ill.*, BD PhD *Harv.*,
Religion
MITCHELL, Parker D., BSc MA *Dal.*, PhD *Case*
Western Res., *Education*
MOLINARI, Guido, *Studio Arts*
MORRIS, Stanley P., BSc PhD *McG.*, *Physics*
MUKHERJI, Kalyan K., BSc MSc *Calc.*, Dip
Postgrad Leeds, PhD *W. Ont.*,
Geology
NEWSHAM, Gwendolyn S., BA BEd *Sask.*,
MEd *Alta.*, PhD *Montr.*, *TESL*
(Applied Linguistics)
PARK, Désirée, BA *Coll. of William and Mary*,
MA *McG.*, PhD *Indiana*, PhD *McG.*,
Philosophy
PHILMUS, Maria, PhD *Ca'Foscari*, *Venice*,
English
REIDY, Martin, BA *Boston Coll.*, MA PhD *Tor.*,
Philosophy
RYE, Robin T.B., BA MSc *Br. Col.*, PhD *Lond.*,
Chemistry and Biochemistry
SCHWELB, Otto, DipEng *Bud.*, PhD *McG.*,
Electrical and Computer Engineering
SHARP, Marjorie, BA *Sir G. Wms.*, BCL LLB
McG., *Management*
SHEPS, G. David, BA *Manit.*, MA *Cornell*,
English
SMUCKER, Joseph, BA *Bluffton*, MA PhD *Mich.*
State, *Sociology*
SORIC, Joseph, BSc MSc *McM.*, *Mathematics*
and Statistics
STEVENS, Florence, BA *Sir G. Wms.*, MA
C'dia, PhD *Genève*, *Education*
SUGDEN, Leonard, BA BEd MA *Manit.*, Dd'U
Nice, *Études françaises*
TAKAHASHI, Akira, BA *Meiji*, *Tokyo*, MA
Hawaii, PhD *Pitt.*, *Economics*
TURGEON, Jean C., MS PhD *Col.*,
Mathematics and Statistics
VALASKAKIS, Gail, BSc *Wis.*, MA *Cornell*, PhD
McG., *Communication Studies*
WILLIAMS, Blair, BA *Tor.*, MA *Alta.*, PhD *Car.*,
Political Science
ZIENIUS, Raymond H., BSc PhD *McG.*,
Chemistry and Biochemistry

1996 Retirements

ADLEY, Thomas J., BSc *Sir G. Wms.*, PhD *DIC*
Lond., *Chemistry and Biochemistry*
ALLEN, Sr. Prudence, R.S.M., BA *Roch.*, PhD
Claremont, *Calif.*, *Philosophy*
ANDRUS, Donald F.P., BA MA *Tor.*, *Art History*
ANTOLIN, Francisco, BA *Léon-Oviedo*, *Spain*,
Lèsl *Madrid*, MA *Mexico*, Dèsl
Madrid, *Modern Languages (Spanish)*
ARNOPOULOS, Paris J., BSc BA *Sir G. Wms.*,
MA *N.Y.*, MA *Col.*, *Political Science*
BECKMAN, Carolyn, AA *Stockton Coll.*, *Calif.*,
AB MA *Calif.*, PhD *Rutgers*, *Biology*
BLACH, Adolf E., BSc MEng *Sir G. Wms.*, PhD
Montr., Ing *Mechanical Engineering*
BUCKNER, H. Taylor, BS *Louisville*, MBA
Montr., PhD *Calif. (Berkeley)*,
Sociology
BUTOVSKY, Mervin, BA *Sir G. Wms.*, MA
McG., *English*
CARTER, Sylvia I., BA MA *Tor.*, MEd EdD
Mass., *Applied Social Science*
CHARLTON, David E., BSc *Durh.*, PhD *Sask.*,
Physics
COHEN, Philip, BA *Sir G. Wms.*, Dip *Conserv.*
de Musique du Québec, *Music*
COLDEVIN, Gary O., BA BEd *Sask.*, MEd PhD
Wash., *Education*
COOKE, Edwy, BA *Tor.*, MFA *Iowa*, *Art History*
COYTE, Ronald C., BA MA *Oxf.*, *Political*
Science
CURNEW, G. Robert, BComm *Sir G. Wms.*,
MBA *Qu.*, CA, *Accountancy*
DEWES, Mervin, Art Teach Dip *Johannesburg*
Sch. of Art, DipDesign *Research St.*
Martins Sch. of Art, *Lond.*, *Painting*
and Drawing

- DEWEY, Gerald, BA MA PhD *Notre Dame (Ind.)*, *Sociology*
- DINIACOPOULOS, Denis, BA *Montr.*, *Communication Studies*
- EGAN, Edmund, BA *Manhattan*, MA PhD *Fordham*, *Philosophy*
- FARRELL, Mona, BA BEd *Montr.*, MA PhD *McG.*, *Education*
- FELDMAN, Dorel, BA PhD *Iasi*, *Centre for Building Studies*
- FRANKLIN, Martin H., BA BCL *McG.*, *Management*
- GARNET, Paul, BA MA *Sheff.*, PhD *McG.*, *Theological Studies*
- GOLDMAN, Carl, BEng MEng *McG.*, Ing, *Civil Engineering*
- HAMBLIN, F. Douglas, BSc MSc *Durh.*, CEng *Sask.*, Ing, *Engineering*
- HAYES, Frank, BSc *Lond.*, PhD *McG.*, *Economics*
- HILTON, Anthony, BA *Brown*, MA PhD *McM.*, *Psychology*
- HOFBECK, Joseph, CES *Sorbonne*, STL STD *Inst. Catholique Paris*, *Theological Studies*
- HORWICH, Herbert, BA MA *Dal.*, PhD *Montr.*, *Sociology*
- JACKSON, John D., BA *Sir G. Wms.*, MA PhD *Mich. State*, *Sociology*
- JAMES, Ellen, BA *Penn.*, MA *Col.*, PhD *McG.*, *Art History*
- JONES, Dennis, *Printmaking and Photography*
- JOOS, Ernest, BA *Bud.*, MA *McG.*, Lic Phil PhD *Montr.*, *Philosophy*
- JORDAN, Albert, MA *Oxf.*, *Études françaises*
- KIM, Haydon, BSc MSc *Seoul Nat'l.*, PhD *McG.*, *Mathematics and Statistics*
- KORNBLATT, Jack A., BS *Calif.*, PhD *Cinc.*, *Biology*
- KUMARAPALI, Stephen, BSc *Lond.*, MSc PhD *McG.*, *Geology*
- LADD, Herbert, BSc *Vermont*, MA PhD *Windsor*, *Psychology*
- LAFFEY, John F., BA *Pitt.*, PhD *Cornell*, *History*
- LEVY, Claude M., BA *Sir G. Wms.*, MA PhD *McG.*, *Liberal Arts College*
- LIGIER, Marie-Françoise, BA *Besançon*, Lèsl *Montr.*, *Études françaises*
- LIN, Sui, BSc *Ordinance Coll.*, *China*, MSc(MechEng) PhD *Karlsruhe*, Ing, *Mechanical Engineering*
- LIPKE, Kathryn, BS *N. Dakota State*, MA *Calif.*, *Sculpture, Ceramics and Fibres*
- MACALUSO, Joseph A., MA *N.Y.*, *Modern Languages (Spanish and Italian)*
- MacKAY, Barbara E., BA *W. Ont.*, MA *N.Y.*, *Theatre*
- MacKINNON, John A., BSc *Qu.*, MSc PhD *McG.*, *Physics*
- McDONOUGH, Sheila, MA PhD *McG.*, *Religion*
- McGRAW, John, BA *Notre Dame*, PhB PhL *Inst. of Phil.*, *Chic.*, PhD *Angelicum*, *Rome*, *Philosophy*
- McNAMARA, Vincent, BA *Tor.*, MA LPh DPhil *Laval*, *Philosophy*
- McTAVISH, Ronald, BSc *Lond.*, MA PhD *Strath.*, *Marketing*
- MENDELSON, Leonard R., BA *Brandeis*, MA *Harv.*, PhD *Wis.*, *English*
- MEYERS, Jan, MSc *Delft*, *Holland*, *Finance*
- MILLER, F. John, Nat'DipDes *Ealing Coll. of Art*, ATD *Hornsey Coll. of Art*, *Lond.*, *Painting and Drawing*
- MOROZIUK, Russel P., BA MA *Ott.*, BTh LTh *Greg.*, STD *Pontif. Inst. of Eastern Ecclesiastical Studies*, *Rome*, *Theological Studies*
- O'BRIEN, John W., MA PhD *McG.*, *Economics*, *Rector Emeritus*
- OSMAN, Mohamed O.M., BEng *Cairo*, DrScTech *Swiss Fed. Inst. Tech.*, Ing, *Mechanical Engineering*
- PALLEN, Robert H., BSc *Sir G. Wms.*, MSc PhD *W. Ont.*, *Chemistry and Biochemistry*
- PERRY, Campbell W., BA PhD *Syd.*, *Psychology*
- PINSKY, Alfred, Dip *Montr. Mus. Fine Arts*, *Painting and Drawing*
- PITSILADIS, Peter E., BComm *Sir G. Wms.*, MBA *W. Ont.*, PhD *Wash.*, *Management*
- PRESTON, Eileen M., BA *Manc.*, MA *McG.*, *Classics*
- RAJAN, G.S., BA MA *Annam.*, MS PhD *Wis.*, *Management*
- SASSANO, Giampaolo P., DSc Dottorato *Milan*, PhD *Alta.*, *Geology*
- SINGH, Lalita P., BA MA *Alld.*, PhD *Delhi* PhD *A.N.U.*, *Political Science*
- SMITH, Irving H., BA *Sir G. Wms.*, MA PhD *McG.*, *History*
- SOMMER, Richard J., BA *Minn.*, MA PhD *Harv.*, *English*
- SPICER, Malcolm, BA *Montr.*, MA *Inst. d'Études Médiévales*, *Montr.*, MA *McG.*, PhD *Ott. PhD(Th) Coll. Dom.*, *Theological Studies*
- TIFFOU, Maylis, BA *Toulouse*, DES *Montr.*, *Études françaises*
- TRUCHON, P. Normand, BA *Laval*, MA *McG.*, *Études françaises*
- UDY, John M., BA *Durh.*, PhD *C'dia*, *Geography and Urban Studies*
- WAINWRIGHT, Barry, RCA, DipFA *Van. Sch. of Art*, *Printmaking and Photography*
- WANG, Yao H., BS *National Taiwan*, MBA *N.Y.*, MS *Stan.*, PhD *Ohio State*, *Mathematics and Statistics*
- WAREHAM, Ronald S., BA *R.M.C.*, MA *Mich.*, *English*
- WATERS, Katherine E., BA *McG.*, MA *Oxf.*, *English*
- WESTBURY, Ronald A., BSc PhD *McG.*, *Chemistry and Biochemistry*
- YOUNG, James W., BSc *Lond.*, MA *Br. Col.*, PhD *McG.*, *Geography*
- ZAKI, Mohammad, BSc *Luck.*, MSc *Alig.*, PhD *Montr.*, *Mathematics and Statistics*



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s e c t i o n

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FACULTY OF ARTS AND SCIENCE

Curriculum changes in the Faculty will affect some of the entries in the following list. Students should consult with their program adviser if they already have credits for a course which may be equivalent to another.

Students who have taken a given course under an old number may not repeat it for credit under an equivalent number.

NOTE: The use of "C" in the course prefix is discontinued. Unless otherwise indicated, a course previously prefixed with a C is equivalent to the identically numbered one without the C prefix.

NOTE: For old course numbers used prior to 1980-81, see Undergraduate Calendar 1984-85, or consult a program adviser.

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Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
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452 293	FLIT 495 FRAN 495
471 }	478	FLIT 496 FRAN 496
472 }		FRAN 307 FRAN 308
473 479	FRAN 330 FRAN 266
474 480	FRAN 331 FRAN 267
480 471	FRAN 332 FRAN 264
		FRAN 333 FRAN 269
English as a Second Language		FRAN 408	{ FRAN 404 FRAN 405
209 }	C201	FRAN 481 FRAN 381
210 }		FRAN 482 FRAN 382
Études françaises		FRAN 485 FRAN 385
FLIT 220 FRAN 220	FRAN 488 FRAN 486
FLIT 230 FRAN 270	FTRA 200 TRAD 200
FLIT 240 FRAN 271	FTRA 201 TRAD 201
FLIT 298 FRAN 298	FTRA 202 TRAD 202
FLIT 300 FRAN 321	FTRA 298 TRAD 298
FLIT 302 FRAN 322	FTRA 299 TRAD 299
FLIT 303 FRAN 252	FTRA 301 TRAD 301
FLIT 305 FRAN 253	FTRA 304 TRAD 304
FLIT 308 FRAN 364	FTRA 310 TRAD 310
FLIT 310 FRAN 420	FTRA 311 TRAD 311
FLIT 312 FRAN 425	FTRA 398 TRAD 398
FLIT 314 FRAN 429	FTRA 399 TRAD 399
FLIT 316 FRAN 432	FTRA 401 TRAD 401
FLIT 318 FRAN 440	FTRA 402 TRAD 402
FLIT 320 FRAN 446	FTRA 403 TRAD 403
FLIT 341 FRAN 352	FTRA 404 TRAD 404
FLIT 343 FRAN 353	FTRA 405 TRAD 405
FLIT 345 FRAN 356	FTRA 406 TRAD 406
FLIT 347 FRAN 357	FTRA 408 TRAD 408
FLIT 349 FRAN 358	FTRA 409 TRAD 409
FLIT 360 FRAN 360	FTRA 410 TRAD 410
FLIT 362 FRAN 256	FTRA 412 TRAD 412
FLIT 364 FRAN 257	FTRA 414 TRAD 414
FLIT 370 FRAN 370	FTRA 416 TRAD 416
FLIT 372 FRAN 371	FTRA 420 TRAD 420
FLIT 374 FRAN 372	FTRA 421 TRAD 421
FLIT 410 FRAN 421	FTRA 492 TRAD 492
FLIT 412 FRAN 426	FTRA 498 TRAD 498
FLIT 414 FRAN 431	FTRA 499 TRAD 499
FLIT 416 FRAN 435		

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Exercise Science			
207	303	358	C355
215	{ C215 C315, C316 C413, C415	359	C355
218	308 { C309 C310	360	{ 361 362
221	{ MATH 207 BIOL 222 PSYC 315	375	475
233	333	376	371
257	353	377	372
262	C337	378	373
263	335	403	405
270	370	406	306
271	470	433	C401
272	472	438	URBS 488
311	398E	458	498K
321	398F	472	{ 372 498Z GEOL 498C
335	398G	474	498R
336	398H	491	URBS 491
338 } 336 ... 433		Geology	
339 }		224	C215
348	448, 498C	231	C221
351	C451	232	C223
358	C453, 456, 457	331	C310
380	403 .. C402 .. 498F	332	C317 C412
390	398I	415	C315
414	C317	417	C416 C412
422	404 .. C401 .. 498K	German	
438	339	200 or 201 or 202	{ 210 211
449	436	240 or 241 or 242	{ 250 251
452	498S	256, 257	255
454	C417	271	270
480	460, 499A	301, 302	300
483	463, 499B	306, 307	305
492	491	365, 366	360
		405, 406	400, 452
		411, 412	410
		416	415
		421	420
		426, 427	425
		431, 432	430
		436	435
		461, 462	465
		History	
		219	CLAS C230
		221	CLAS C231
		223	CLAS C240
		225	CLAS C242
			C227 CLAS C266, C264
			C229 CLAS C267, C265
		276	371
		277	374
		302 }	397
		303 }	
		304 }	
		306	347
Geography			
203	SCHA 254		
204	SCHA 253		
210	201		
220	211		
260	267 { C265 C266 C262		
270	271 { 275 { C275 276 { C276		
275	C271		
276	C271		
290	{ 211 271 275, 276		
300	{ 303 } 305 304 }		
312	C412		
315	C316		
330	331		
342	398B		
347	C341		
352	C356		
353	C356		

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
312 ...	302, 303, 397, 402, 403	303	C301
316 }	324	309	410
318 }		310	C405
323	224 ... CLAS 341 ... CLAS 241	315	446 ... COMS C446
327	226 ... CLAS 343 ... CLAS 243	318	408
337 }	322	319	419 498J
338 }		330	430
340 }	342	336	415
341 }		343 }	COMS C340
351 }	345		COMS C342
352 }			COMS C343
359 }	368	400	C401
360 }		402	C402
375 }	380	428	498M
376 }			
402	302, 397	Liberal Arts College	
403	303, 397	295 }	294 }
		396 }	394 }
		397	493 392
Interdisciplinary Studies		Library Studies	
202	LUCC 200, LUCC 202	205 }	201
215	MATH 215		202
223	PHIL 223	322 }	324 }
250	PHIL 220, PHIL 228, SCHA 250	323 }	325
254	SCHA 254, URBS 254		330
283	HIST 283	350 }	331
290	INTE 298A		345
292	INTE 298B	355 }	331
293	INTE 298B		345
296	INTE 298S	433	C333
333	INTE 499A, LUCC 333, LUCC 499A		
410	LUCC 410	Linguistics	
440	INTE 400 LUCC 400	310	C210
441	LUCC 440, LUCC 441	311	C211
		312	410
		372	C370, C371
		400 }	411
		401 }	
		441	SPAN 665
		451	ARAB 451
Italian		Loneragan University College	
200 or 201 or 202	{ 210	202	LUCC 200, INTE 202
	{ 211	333	LUCC 499A, INTE 333, INTE 499A
240 or 241 or 242	{ 250	410	INTE 410
	{ 251	440	LUCC 400
253 }	252	441	LUCC 400, LUCC 440, INTE 400, INTE 441
254 }			
256 }	255		
257 }			
301 }	300		
302 }			
306 }	305		
307 }			
310	400		
311	401		
366	360		
432 }	431		
433 }			
437	405		
442 }	440		
443 }			
		Mathematics and Statistics	
Journalism		ACTU 256	MATH 326, MAST 335
203	306	ACTU 257	MATH 327
210	C305	ACTU 286	MATH 229
302	C300; C301	ACTU 357	MATH 427
		ACTU 457	MATH 428
		ACTU 486	MATH 429
		MAST 217	MATH 216, COMP 238
		MAST 218	MATH 262
		MAST 219	MATH 263

[illegible]

Course	Old Numbers and Equivalents		Course	Old Numbers and Equivalents	
473	412	392	.....	376
474	417	393	.....	378
487	467	394	.....	385
488	468	422	.....	359 451
489	449	423	.....	417
			424	.....	431
			433	.....	470
Physics			435	.....	475
245	243	438	.....	453
290	{	295	480	.....	462
		296	481	.....	432
292	397	482	.....	434
346	344	484	.....	437 436
352	252			
353	354	Psychology		
458	456	280	.....	C391
494	495	281	.....	C392
			318	.....	384
Political Science			322	}	
202	{	201	323	}	339
		203	324	}	
204	{	232	325	.....	398B
		234	326	}	
205	{	207	327	}	336
		208	331	}	
206	271	332	}	333
211	353	334	}	
307	317	335	.....	398I
309	275	343	}	
310	327	344	}	342
314	}		346	}	
316	}	334	347	}	345
319	233	349	}	
324	231	350	}	348
326	314	352	}	
328	316	353	}	351
330	260			
336	340	358	{	357
					360
338	412			363
		{ C411	359	.....	363
		{ C413	362	{	357
344	230			360
349	}		365	{	357
352	}	336			360
350	{	241	367	{	357
		243			360
364	273	368	.....	390
366	{	343	370	}	
		345	373	}	330
368	472	379	.....	C391
		{ 382	385	}	
372	{	383	386	}	375
		474	391	.....	390
376	}		392	}	
378	}	374	393	}	364
379	{	346	395	.....	393
		348	396	}	
380	360	397	}	366
382	}		421	.....	420
383	}	372	422	.....	420
384	370	436	.....	438
			439	.....	437

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Religion		WSDB 298	WMNS 298
201	{ HEBR 210 HEBR 211	WSDB 299	WMNS 299
202	{ HEBR 250 HEBR 251	WSDB 370	WMNS 370
310	331	WSDB 380, 480 . .	WSDB 394
312	332	WSDB 381	WSDB 398B
317	374	WSDB 382	WSDB 398F
336	352 C329	WSDB 383	WSDB 398M
338	357	WSDB 390	WMNS C393
339	358	WSDB 393	WMNS 394
340	320	WSDB 394	WMNS 393
342	321	WSDB 398	WMNS 398
347	318	WSDB 399	WMNS 399
348	325	WSDB 490	WMNS 492
349	316 C312	WSDB 491	WMNS 493
350	314	WSDB 492	WMNS 490
364	315	WSDB 493	WMNS 491
375	363	WSDB 498	WMNS 498, WMNS C491, C492,
376	343	WSDB 499	WMNS 499
378	370		
379	C465	Sociology	
380	335	203	C200
397	354	212 }	210
403	362	213 }	
410	C499	244	344
		262 }	C260
		263 }	
		275	370
		276	372
		277	377
School of Community and Public Affairs		315 { 313 }	C312
SCPA 201 }	SCPA 300	314 }	
SCPA 203 }		327 }	C326
SCPA 204 (POLI 204) {	POLI 232	328 }	
	POLI 234	329 }	C340
SCPA 205 (HIST 205)	HIST 205	429 }	
SCPA 210 (HIST 210)	HIST 210	333	C435
SCPA 211 (POLI 211)	POLI 211	336 }	C335
SCPA 215 {	ECON 201	337 }	
	ECON 203	338 }	C337
SCPA 301	SCPA 401	339 }	
SCPA 333 (SOCI 333) . . .	SOCI 333	342	343
SCPA 353 (SOCI 353) . . .	SOCI 353	355 . . ANTH	355
SCPA 355 (SOCI 355) . . .	SOCI 355	361 }	C360
SCPA 460 (COMS 460) . .	COMS 460	362 }	
SCPA 461 (COMS 361) . .	COMS 361	366 }	368
SCPA 465 (COMS 465) . .	COMS 465	367 }	
		374	C426
		376	270
		378	272
Science and Human Affairs		402 }	C400
203	254	403 }	
204	253	406 }	C405
250	INTE 250, PHIL 220, PHIL 228	407 }	
253	URBS C253	408 {	402
254	URBS C254, INTE 254		403
353 }	451	433	432
354 }		437	337
355 }	450	445	345
356 }		457	357
		474	374
Simone de Beauvoir Institute			
WSDB 290	WMNS 290, WMNS C290,		
WSDB 291	WMNS 291, WMNS C291,		

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Spanish			
200 or 201 or 202	{ 210 211	270	{ 471 472
240 or 241 or 242	{ 250 251	303	..... 300
256 }		320	..... 423
257 }	255	322	..... 425
306 }		331	..... 430
307 }	305	331 }	210 330
362 }		332 }	
363 }	361	332	..... 442
365	..... 360	334	..... 440
403	..... 303	336	..... 434
406	..... 407	340	..... 370
412	..... 413	351	..... 390 { 456 457
421 }		362	{ 444 462
422 }	431	366	..... 466
423 }		369	{ 468 469
424 }	432	384	{ 382 383
441 }		387	{ 385 386
442 }	440	452	{ 453 454
451	..... 450	493	..... 491
		494	..... 492
Teaching English as a Second Language		Urban Studies	
324	..... 326	230 }	
324	{ C322 C323	240 }	URBS 280
330	..... 430 ... 498B	250 }	{ GEOG 299U
331	..... 232	260 }	{ URBS 290
413	{ C411 C412	333	{ URBS 334 GEOG 399U
424	..... 427	438	{ URBS 488 GEOG 438
424	{ C422 C423		
426	..... 385 { C382 C383 C384		
433	..... C479		
487	..... 485 { C482 C483 C484		
Theological Studies		Women's Studies (See Simone de Beauvoir Institute)	
202	..... 222		
203	..... 310		
204	..... 350		
206	..... 421		
210	{ 331 332		
217	{ 215 216		
219	{ 220 221		
222	{ 300 310		
234	..... 372		
242	..... 241		
265	..... 264		

NOTE A The use of this note after certain course descriptions indicates that there exists an equivalent course and the students who have credits for this equivalent course may not take the listed course for credits. To find out the equivalents to the listed course refer to the index below.

NOTE C The use of this note after a course description indicates that with the permission of the Department a student may take the listed course twice for credits provided that a different subject is dealt with the second time.

Course Old Numbers and Equivalents					Course Old Numbers and Equivalents				
Accountancy									
214	N214	211		315B, 300	243	N243	<div><div>Psych C315 242 Econ C221 Math 241 Stat 242</div></div>	308Z	
217				{ 411A/B, 400 402					
220	(120)			320Z					
221	(121)			320Z					
230	213	N213	211	313A/B, 300	244	N244	<div><div>242 Econ C222</div></div>	308Z	
240	218	N216	{ Man 411 Fin 416 }	413B, 402	250	{ 313 314 315			
310	323	N313	411	415B, 400	253		QUAN 353		
320	326				313	N313	{ 411 QA 411 }	518Z	
330	303	C403	N421	503A 421	314	N314	{ 411 QA 411 }	518Z	
340	441	N441	{ Com Law 441 }	513A/B, 504	325	MANA 345			
350	414	{ N215 N315 }	{ Man 411 Fin 416 }	511B 425	350	365			
400	461	N461		509A, 507B	353	N353	Math 415		
407			407	507B	354	N354	Math 415		
420	335	C325	N314 412	419B, 408	361	316			
429		N432	431	{ 517B, 508 519B, 508 }	362	412			
430	422	N422			371	345			
440	442			515B, 504	375	448			
450	432		N433	431 433	378	444			
451		N451	{ (Computer Auditing New Name)		381	323			
468		Intl Bus	C468		382	327			
470			470	560Z	384	486	427		
490	471		471	560Z	385	493	417		
					425	452			
					445	N445	442		
					446	N446	442		
					451	416			
					464	415	N415	412	
					466	414			
					477	447			
					481	424	N424	421	
					482	425	N425	422	
					484	383	423	N423 421	
					485	421			
					490	433	N433		
					492	426	N426	422	
Administration									
201	(101)	N201		312Z					
202	(102)	N202		312Z					
350		MARK	C350	515Z					
Decision Sciences and Management Information Systems									
<i>*NOTE: The 'QUAN' designation has been changed to 'DESC'. Formerly Quantitative Methods</i>									
222	221								

Course	Old Numbers and Equivalents				Course	Old Numbers and Equivalents			
495	{	482			266		466		
		484			313			413A/B, 414	
496	386	483	422		315			415B, 414	
John Molson School of Business — COMM Courses					340	N340	430		
215	DESC	243			341	N341	430		
217	ACCO	213			343	441			
222	MANA	340			345	N345	421	470Z	
224	MARK	213 & 350			346	N346	421	470Z	
225	DESC	250			362	462	N462	432	
301	DESC	222			364	464			
305	ACCO	218			365	465			
308	FINA	214 & 315			368	N368	451	503B	
315	MANA	475			369	N369	451		
320	COMM	410	MANA 450		401			501A	
401	COMM	310	MANA 460		405			505B	
Finance					407			507A	
214	314				409			509B	
	215	N215	315, 413	407/A/B, 408	460	N460	453	511B	
314		N314	413	409B, 408	461	N461	453		
315		N315	413	215	463	N463	432		
				314	464	N464	433		
320	424				465	N465	433		
330	430	N430	424		466	{	N466 452		
350	491						Intl Bus C466		
370	467	Int Bus	C467		467	N467	452		
380	440	N440	423, 426	541B	475	N475	211	502Z	
390	460	N460	429		476	N476	211	502Z	
400	441	N441	423, 426		499			560Z	
401	417	N417			Marketing				
402	420				201	213 & 350			
410	452	N450	423, 427	530Z	213	N213	{ 211, 411, 421 }	419A/B, 320	
411	453	N450	423	530Z	350	N350	{ 211, 411, 421 }	421B, 320	
412	419				351	ADMI	C350,	515	
418		N418			402	N402	412,	451	551B
450	491				405	352	N352	431	
455			427		452	N342	412,	451	
470	467	Int Bus	C467		453	N453	{ 221, 222, 431 }		523B
480	461	N461	429		454	N454	414,	461	521A
490	431	N431	424		462	Intl Bus	C462		
Management					463	N463	481		
211	N211	{	Com Law 211		464	N464			
213	N213	{	Psyc 011 211	Psyc C200	465	Intl Bus	C465		
	214	N214			485	N485			
	215	N215	Soc 211		491	N491			
					495	490	N490		

200.3 FACULTY OF FINE ARTS

NOTE A The use of this note after certain course descriptions indicates that there exists an equivalent course and the students who have credits for this equivalent course may not take the listed course for credits.

Equivalences prior to 1977-78 are not listed below. For courses with indicated equivalences which are not listed below consult either the Department Office, the Office of Student Affairs, Faculty of Fine Arts or the Office of the Registrar.

NOTE C The use of this note after a course description indicates that the course may be repeated for credit. However, either the number or the letter preceding the number must differ.

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Art History		Cinema	
ARTH 260	ARTH 220	FMAN 202	FMAN 312, CINE C312
ARTH 262	ARTH 347	FMAN 214	FMAN 314
ARTH 263	ARTH 348	FMAN 303	} FMAN 302, 313, CINE C313
ARTH 264	ARTH 320	FMAN 304	
ARTH 266	ARTH 322	FMAN 316	FMAN 498E
ARTH 267	ARTH 234, C234	FMAN 319	FMAN 498B
ARTH 268	ARTH 234	FMAN 352	FMAN 498H
ARTH 284	ARTH 280, 281	FMAN 402	FMAN 414, CINE C414
ARTH 290	ARTH 210	FMAN 446, 447	FMAN 445, CINE C436
ARTH 350	ARTH 320	FMAN 448	CINE C428
ARTH 352	ARTH 322	FMAN 449	CINE C429
ARTH 360	ARTH 339	FMPR 231	CINE C311
ARTH 361	ARTH 339	FMPR 332	CINE C411
ARTH 362	ARTH 440	FMPR 334	CINE C334
ARTH 363	ARTH 441	FMPR 335	CINE C335
ARTH 364	ARTH 342, 442	FMPR 337	CINE C437
ARTH 365	ARTH 443	FMPR 339	CINE C433
ARTH 366	ARTH 343	FMPR 341	CINE C333
ARTH 367	ARTH 455	FMPR 344	} FMPR 336
ARTH 368	ARTH 459	FMPR 345	
ARTH 369	ARTH 458	FMPR 350	FMPR 498F
ARTH 370	ARTH 244, C444	FMPR 432	CINE C412
ARTH 371	ARTH 425	FMPR 438	CINE C438
ARTH 373	ARTH 427	FMPR 442	FMPR 498C
ARTH 388	ARTH 282	FMPR 446, 447	FMPR 445, CINE C436
ARTH 397	ARTH 410	FMPR 448	CINE C428
ARTH 400	ARTH 484	FMPR 449	CINE C429
ARTH 401	ARTH 495	FMST 200	CINE C200
ARTH 402	ARTH 415	FMST 211	CINE C211
ARTH 434	ARTH 267, C234	FMST 212	CINE C212
ARTH 499	ARTH 480	FMST 214	FMST 314, CINE C426
		FMST 215	FMST 315, CINE C427
		FMST 217	FMST 398H
		FMST 321	CINE C321

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
FMST 322	..... CINE C322	INMS 450	..... INMS 300
FMST 323	..... CINE C323	INMS 460	..... CMUS 420 .. CMUS C421, C422
FMST 325	..... FMST 498H	JAZZ 200	..... CMUS 200 .. CMUS 498G, 498H
FMST 329	..... CINE 329	JAZZ 301	..... INMS 498E
FMST 331	..... FMST 498E	JAZZ 302	..... INMS 332
FMST 335	..... FMST 398	JAZZ 305	..... CMUS 330
FMST 343	..... FMST 498B	JAZZ 401	..... INMS 431
FMST 422	..... CINE C422	JAZZ 402	..... INMS 432
FMST 423	..... CINE C423	JAZZ 405	..... CMUS 430
FMST 425	..... FMST 498J	JPER 220	..... CMUS 300
FMST 426, 427	.. FMST 425, CINE C436	JPER 321	..... CMUS 401
FMST 428	..... CINE C428	JPER 330	..... MPER 330
FMST 429	..... CINE C429	JPER 341	..... MPER 498L
		JPER 421	..... CMUS 402
		JPER 430	..... MPER 430
		JPER 441	..... MPER 498O
Contemporary Dance		MHIS 311	..... MHIS C301
DANC 220	..... DANC 220, C200	MHIS 312	..... MHIS C301
		MPER 201	..... MPER 200 MPER C201
Design Art		MPER 231	..... MPER 220, 221 ... MPER C201
DART 200	..... DESI 200, C200	MPER 301	..... MPER 300, 498 ... MPER C301
DART 202	..... DESI 202	MPER 331	..... MPER 498K
DART 203	..... DESI 203	MPER 332	..... MPER 320, 498
DART 210	..... DESI 230	MPER 370	..... MPER C431, C432
DART 300	..... DESI 311	MPER 390	..... MPER C330
DART 310	..... DESI 321	MPER 401	..... MPER 400, 498
DART 400	..... DESI 411, 431	MPER 431	..... MPER 498Q
DART 422	..... DESI 422	MPER 432	..... MPER 420, 498
DART 426	..... DESI 423	MPER 470	..... MPER C433, C434
DART 424	..... DESI 424	MPER 490	..... MPER C430
DART 425	..... DESI 425	MPER 498A	..... MPER 431
DART 440	..... DESI 440		
DART 499	..... GDES 499		
		Painting and Drawing	
Faculty of Fine Arts		ART 261	..... ART C461
FFAR 250	..... IDYS 250	ART 417	..... ART C420
FFAR 251	..... IDYS 251	ART 420	..... ARTH 267, C234
FFAR 252	..... IDYS 252	DRAW 470	..... ART C436
FFAR 390	..... FFAR 399G	PTNG 430	..... PTNG 499A
		PTNG 440	..... PTNG 499B
		PTNG 470	..... ART C436
Interdisciplinary Studies			
IDYS 200	..... INRA 300	Photography	
IDYS 300	..... INRA 400	PHOT 200	..... PHOT C201, C301
IDYS 491	..... INRA 391	PHOT 311, 312	.. PHOT 310
IDYS 492	..... INRA 392	PHOT 321, 322	.. PHOT 320
Music		Print Media	
EAMT 205	..... CMUS 310	PRIN 211, 311	... PRIN 210 PRIN C200
EAMT 305	..... CMUS 410	PRIN 221, 321	... PRIN 220 PRIN C200
EAMT 350	..... CMUS 350	PRIN 231, 331	... PRIN 230 PRIN C200
EAMT 406	..... CMUS 446	PRIN 241	..... PRIN 240
EAMT 407	..... CMUS 447	PRIN 310	..... PRIN C300
EAMT 451, 452	.. CMUS 450	PRIN 320	..... PRIN C300
INMS 209, 250	... MUSI 210 MUSI C221, C222	PRIN 330	..... PRIN C300
INMS 320	..... INMS C321, C322	PRIN 361	..... PRIN 460
INMS 350	..... INMS 200	PRIN 450	..... FBRs C440
INMS 360	..... CMUS 320 .. CMUS C321, C322	PRIN 470	..... ART C436
INMS 410	..... INMS C411		

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Sculpture, Ceramics and Fibres			
CERA 230	CAFT C310, C230	DFTT 414	{ SCEN 411, C410, C400, C420
CERA 330	CAFT 330	DFTT 451, 452	DFTT 450
CERA 430	CAFT 430	DFTT 498	SCEN 498
CERA 450	{ CAFT C450 ART C436	DINE 412	DINE C410
FBRS 240	CAFT C240	PROD 201	PROD C200, C201
FBRS 260	CAFT C260	PROD 311	PROD C302
FBRS 340	CAFT C340	PROD 408	PROD 308
FBRS 360	CAFT C360	PROD 409	PROD 309
FBRS 370	FBRS 470, ART C440	PROD 411	PROD C402
FBRS 440	CAFT C440	THEA 211	} THEA 240
FBRS 450	{ CAFT C450 ART C436	PROD 211	
FBRS 460	CAFT C460	THEA 216	THEA C200, C281
FBRS 480	FBRS 460 or FBRS 440	THEA 303	THEA 300, C300
SCUL 450	ART C436	THEA 312	THEA 403
		THEA 321	THEA C320
		THEA 322	THEA C320
		THEA 404	THEA 304 THEA 300, C300
		THEA 411	TPER C305
		THEA 412	TPER C405
		THEA 420	TPER C402
		TPER 200	TPER 201, 202
		TPER 216	TPER C204
		TPER 301, 302	TPER 300 TPER 223, 224, 306 & 307
		TPER 313	TPER 213
		TPER 323	TPER 214
		TPER 324	TPER 313
		TPER 325	TPER 411
		TPER 333	TPER 413 TPER C406, C402
		TPER 345	TPER 215 TPER C203
		TPER 355	TPER 315
		TPER 401, 402	TPER 400 TPER 223, 224, 306 & 307
Theatre		Women and the Fine Arts	
DFHD 209	} DINE 200	WFAR 320	FFAR 320, 399A
DFHD 210		WFAR 420	FFAR 420
DFHD 302	DINE 302		
DFHD 303	DINE 303 DINE 202		
DFHD 311	DINE 498F		
DFHD 312	DINE 412 or 413		
DFHD 405	DINE 405		
DFHD 415	DINE 415		
DFHD 421	DINE 420		
DFTT 209	} DFTT 250		
DFTT 210			
DFTT 305	SCEN 305		
DFTT 315	SCEN 302, C310		
DFTT 326	SCEN 322		
DFTT 336	SCEN 306		
DFTT 337	SCEN 307		

NOTE: For old course numbers used prior to 1986-87 see Undergraduate Calendar 1985-86.

NOTE: The use of "C" in the course prefix is discontinued. Unless otherwise indicated below, a course previously with a C prefix is equivalent to the identically numbered one without the C prefix.

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Engineering ENGR 211 ENGR 212 ENGR 342 ENGR C341 ENGR 343 CIVI C354 ENGR 344 & 345 CIVI C353 ENGR 370 ENGR 274 & ELEC 341 ENGR 401 ENGR 403 ENGR 451 CIVI C491 ENGR 452 CIVI C452 ENGR 455 CIVI C455		Mechanical Engineering MECH 211 ENGR 211 & MECH 211 MECH 343 MECH 341 & 342 MECH 361 ENGR 362 MECH 372 ELEC 318 MECH 490 ENGR 481	
Engineering & Computer Science ENCS 245 ENGR C245 ENCS 281 ENGR C281		Computer Science COMP 220 . COMP 224 & 285 . COMP C221 COMP 228 COMP 220 COMP 238 COMP 231 COMP 245 . COMP 244 & 291 . COMP C241 COMP 248 COMP 215 COMP 249 COMP 245 COMP 292 COMP C251 COMP 294 COMP 391 COMP 295 COMP 392 COMP 296 COMP 393 COMP 297 COMP 394 COMP 325 & 386 COMP C325 & C426 COMP 326 COMP C322 COMP 327 . COMP 325 & 385 . COMP C443 COMP 343 & 385 COMP C443 COMP 353 COMP C453 COMP 392 COMP C341 COMP 423 & 485 COMP C423 COMP 427 & 486 COMP C427 COMP 446 COMP 423 COMP 467 COMP 437	
Engineering Mathematics EMAT 332 & ELEC 361 EMAT 312			
Computer Engineering COEN 241 COMP 244 COEN 242 COMP 291 COEN 243 COEN 240 & 241 COEN 311 COEN C411 COEN 312 COEN C413			
Electrical Engineering ELEC 498 ELEC C482 EMAT 332 & ELEC 361 EMAT 312			
Industrial Engineering INDU 323 ENGR 412 INDU 412 INDU 310 INDU 471 INDU 371 INDU 490 INDU 480			

200.7 CREDIT FOR COURSES WITH STATISTICAL CONTENT

Some courses in statistics offered by Departments in the Faculty of Arts and Science, and the John Molson School of Business have common elements, but are not necessarily equivalent. A hierarchical order has therefore been established. The possible substitution of courses for each other proceeds from top to bottom of Figure 1.

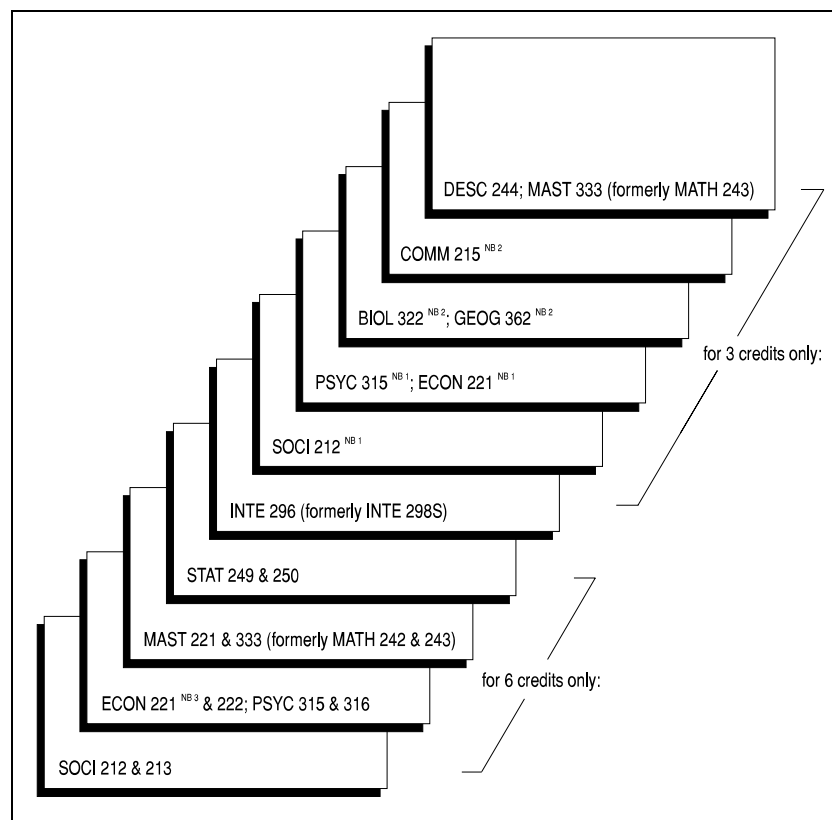


Figure 1

NB 1: Students transferring to programs in Economics, Psychology or Sociology may substitute an equivalent or higher level course for ECON 221, PSYC 315 or SOCI 212 respectively.

NB 2: Students who have completed ECON 222 or PSYC 316 and transfer to programs requiring COMM 215, BIOL 322 or GEOG 362 will be exempted from these courses and may not take them for credit.

NB 3: Students who have completed SOCI 212 and 213 and transfer to Economics program will be exempted from ECON 221 and may not take this course for credit.

No course may be substituted for any course which appears in a box above it in Figure 1.

Any six-credit pair of statistics courses may be substituted for any other six-credit pair which is shown in the same box or in a box which is beneath it in Figure 1.

Any six-credit pair of statistics courses may be substituted for any three-credit introductory statistics course.

Any three-credit statistics course may be substituted for any course which is shown in the same box, or in a box which is beneath it in Figure 1.

No more than six credits will be awarded among the six-credit pairs, and no more than three credits will be awarded among the three-credit courses.



awards, prizes and scholarships

300.1 CONCORDIA ENTRANCE SCHOLARSHIPS

300.2 ENTRANCE SCHOLARSHIPS

300.3 CONCORDIA UNIVERSITY IN-COURSE SCHOLARSHIPS

300.4 CONCORDIA UNIVERSITY COLLEGE SCHOLARSHIPS

300.5 AWARDS AND PRIZES

300.6 ENTRANCE BURSARIES

300.7 CONCORDIA UNIVERSITY IN-COURSE BURSARIES

s e c t i o n

300

300 AWARDS, PRIZES AND SCHOLARSHIPS

NOTE: Unless the award is followed by an asterisk (*), no application is required.

300.1 CONCORDIA UNIVERSITY ENTRANCE SCHOLARSHIPS

Concordia University Entrance Scholarships: A number of scholarships are available to students entering their first year of full-time study. These non-renewable \$2,000 scholarships are awarded by the Undergraduate Scholarships and Awards Committee on the basis of academic achievement during the first three semesters of cégep or equivalent. Some Fine Arts departments may select Entrance Scholarships on the basis of portfolios, auditions or interviews. Students are advised that all Entrance Scholars must be enrolled in a full course load (30 credits) for the academic year. Students should contact the Financial Aid and Awards Office before any changes in course load are implemented in order to ensure the receipt of their scholarship.

All students who submit an application for admission to Concordia University by March 1 for the Fall Term and November 1 for the Winter Term will be considered automatically for an Entrance Scholarship. Only those students offered an Entrance Scholarship will be notified.

Concordia University Mature Students Entrance Scholarships: Intended for students admitted to the University as Mature students. Applications are accepted from students who have successfully completed at least 18 credits, but no more than 30 credits at Concordia University. These non-renewable scholarships are valued at \$2,000 per year. For students who have met the minimum credit requirement, the deadline is August 1 for consideration in the Fall Term and November 15 for consideration in the Winter Term. All scholarship recipients must maintain a full course load (30 credits) for the academic year.

Concordia University Memorial Endowment Entrance Scholarships: Established through the generosity of individuals and organizations to honour Professors Matthew Douglass, Michael Hogben, Jaan Saber and Phoivos Ziogas. The Memorial Endowment provides for four annual Entrance Scholarships. These non-renewable scholarships are awarded by the Undergraduate Scholarships and Awards Committee on the basis of academic achievement during the first three semesters of cégep or equivalent. Some Fine Arts departments may select Entrance Scholarships on the basis of portfolios, auditions or interviews. All Entrance Scholars must be enrolled in a full course load (30 credits) for the academic year.

Concordia University Senior Students Scholarships: Awarded to students 60 years of age or over. Applications are available at the Financial Aid and Awards Office, and must be returned by August 1. These scholarships have a value of \$500 each per academic year, and are renewable for a maximum of four subsequent years, providing the renewal requirements are met.

Concordia University Shuffle Entrance Scholarships: Established through the participation and generosity of the University community and friends of the University. The Concordia Shuffle consists of a fund-raising "Walk-a-Thon" each year between the Sir George Williams and Loyola Campuses of Concordia University. A number of Entrance Scholarships are awarded to students entering their first year of full-time study. The recipients will be selected on the basis of academic achievement during the first three semesters of cégep or equivalent. Mature students may be considered after having successfully completed at least 18 credits, but no more than 30 credits at Concordia University. Some Fine Arts departments may select Entrance Scholarships on the basis of portfolios, auditions or interviews. These awards are open to full-time undergraduate students in any faculty, including International students. Part-time disabled students are also eligible for these awards. Application forms are available from the Financial Aid and Awards Office and must be returned by August 1.

300.2 ENTRANCE SCHOLARSHIPS

Associates of Concordia, Alex C. Duff Scholarship: Established in 1995 by the Associates of Concordia University on the occasion of the organization's dissolution and in memory of Alex C. Duff, a founding member. Eligibility: Open to all deserving undergraduate students without restriction to Faculty.

The Aaron M. Fish Scholarship of Excellence in Mechanical Engineering and the Ilco Unican Inc. Scholarship of Excellence in Mechanical Engineering: Established in 1999 through the generosity of Mr. Aaron M. Fish, Chairman and CEO, Ilco Unican Inc. Eligibility: These non-renewable entrance scholarships are awarded to one male and one female student upon entry to Concordia University to pursue studies in Mechanical Engineering.

The Canada Post Corporation Scholarships in Engineering: These non-renewable entrance scholarships were created through the generosity of Canada Post Corporation to encourage excellent Engineering students to pursue their undergraduate studies at Concordia. These scholarships are awarded on the basis of academic achievement during the first three semesters of cégep or equivalent, to students entering their first year of full-time study in the fields of Computer Engineering, Industrial Engineering or Mechanical Engineering.

Concordia University Alumni Association Entrance Scholarship: Established in 1999 by the Concordia University Alumni Association. Eligibility: Open to all deserving undergraduate students upon entry to Concordia University without restriction to faculty.

Concordia Hong Kong Foundation Entrance Scholarships: These two renewable entrance scholarships were established in 1999 by Concordia Hong Kong Foundation. This foundation was established by Concordia University Alumni in Hong Kong. Eligibility: Open to holders of Hong Kong or Chinese citizenship, who are graduating from secondary school in Hong Kong or S.A.R. or the People's Republic of China.

Rona and Irving Levitt Family Foundation Entrance Scholarships: Intended to assist students attending Concordia University, a number of scholarships are available to students entering their first year of full-time study. These scholarships are valued at \$1,000 each and are non-renewable. They are awarded by the Undergraduate Scholarships and Awards Committee on the basis of academic achievement during the first three semesters of cégep or equivalent and a personal statement provided by the applicant. Application forms are available from the Financial Aid and Awards Office. The deadline is April 1.

Lightspeed Software Technologies Scholarship: Established in 1998 through the generosity of Lightspeed Software Technologies. Eligibility: This non-renewable entrance scholarship is awarded to a first-time, full-time undergraduate student who is pursuing a Major in Physics.

Liberal Arts College Entrance Scholarship: For further details, contact the Principal's office, Liberal Arts College: (514) 848-2565.

Loyola Alumni Association Inc. Education Grant: Created to assist deserving undergraduate or graduate students at any level, whether as entrance or in-course awards. Any Concordia University applicant is eligible but preference will be given to children and grandchildren of active Loyola Alumni Association members. For further information and application forms, contact the Financial Aid and Awards Office. The deadline is April 1.

The Bob McDevitt Award: Established in 2000 through the generosity of his friends and colleagues, this scholarship is awarded on the recommendation of the Journalism Department on the basis of material from the student's application for admission to the Department: transcript of grades, letter of intent, and English proficiency scores. Eligibility: Open to deserving undergraduate full-time students entering their first year of studies in the Department of Journalism.

Reader's Digest Scholarship in Journalism: Established in 2000 through the generosity of Reader's Digest. The Reader's Digest Scholarship in Journalism is awarded on the recommendation of the Journalism Department and the Undergraduate Scholarship and Awards Committee on the basis of portfolio submission and academic achievement during the first three semesters of cégep or equivalent.

Loyola Foundation Inc. Entrance Scholarships

Several endowment funds which originated from donors wishing to support Loyola College allowed for the establishment of these scholarships. Their donations were turned over to the Loyola Foundation shortly after the Foundation's creation in 1973 to be used for objectives, activities and purposes that would "foster and maintain the tradition and spirit of Loyola College," irrespective of the major structural changes anticipated at the time. It is the continuing wish of the Foundation that these scholarships encourage and support the education of persons of good character who respect and share the tradition and spirit of Loyola College.

The awards funded by the Loyola Foundation consist of two renewable entrance scholarships of \$2,000 each. This endowment is the amalgamation of the following awards:

The Dr. William Atherton History Prize Fund
The Ursula Carling Fund
The Mrs. John Moriarty Fund
The St. Ignatius Men's Association Fund
The Clive Moore Memorial Fund
The George V. Uihlein Jr. Memorial Fund
The O'Hearn and O'Connor History Prize Fund
The Loyola Alumni Association Fund
The James Webber Trust Fund
The Clarence G. Smith Memorial Fund

The Susan Langley Fund
The Loyola Evening Students' Fund
The Professors McGuigan and McPhee Fund
The Francis J. Dowling Fund
The Lilley F. Barry Fund
The Kenneth J. McArdle Memorial Fund
The Charles J. Brown Memorial Fund
The Gordon Bennett Memorial Fund
The Avon Products of Canada Fund

Eligibility:

- available to graduates of Loyola High School entering a Concordia University undergraduate program on a full-time basis;
- required presentation of a letter of recommendation from Loyola High School, following the completion of cégep or equivalent;
- awards to be made on the basis of academic achievement at cégep or equivalent and the strength of the recommendation by Loyola High School, with the final selection to be left to Concordia University;
- renewable annually subject to continuing full-time enrolment and maintenance of a GPA of 3.00 or better.

Application:

Application and recommendation forms are available from the Financial Aid and Awards Office of Concordia University and the Admissions Office of Loyola High School. Application and letters of recommendation must be returned by March 1.

Richard and Carolyn Renaud Scholarship: Established through the generosity of the Lengvari family, this entrance scholarship is open to a student applying to a Major in Political Science at Concordia University.

Vince Sirois Memorial Scholarship: Created through the generous assistance of Imperial Oil Limited to honour Vince Sirois, former senior Vice-President and Director, Imperial Oil Limited, and former member of the Board of Advisers, Concordia University, School of Community and Public Affairs. This award is available to a bilingual student entering the School of Community and Public Affairs who, in addition to academic achievement, has demonstrated a commitment to public life. For further details, apply to the Principal, School of Community and Public Affairs: (514) 848-2575.

300.3 CONCORDIA UNIVERSITY IN-COURSE SCHOLARSHIPS

In-course Scholarships are awarded to full-time students (unless otherwise indicated) who have completed at least 24 full-time credits during the previous academic year at Concordia University. Recipients are selected in the summer on the basis of the previous year's academic achievement. These scholarships are paid in the following Fall and Winter Terms. Recipients must maintain their full-time status throughout the year in which the award is tenable. Academic performance is reviewed by the Office of the Registrar. Please note that award recipients may hold only one of the following types of awards in a given academic year:

- Concordia University Entrance Scholarships
- Concordia University In-course Scholarships
- Concordia University In-course Bursaries

Concurrent tenure in the aforementioned awards is not allowed unless expressly authorized by the University Undergraduate Scholarships and Awards Committee.

Open to Students in Any Faculty

Association of Alumni of Sir George Williams University Inc. Scholarship: Established in 1988 through the generosity of the Association of Alumni of Sir George Williams University. Eligibility: Open to all full-time students.

Russell Breen Scholarship: Established in 1985 in honour of Dr. Russell Breen for his many years of dedication and service to Loyola College and Concordia University. Eligibility: Open to all full-time students.

Laurie Brodrick Scholarship: Established in 1995 in memory of Ms. Laurie Brodrick, an athlete and graduate of Concordia University. Eligibility: Open to a second-year undergraduate athlete.

Campaign for the New Millennium Scholarships: Established in 1999 through the generous commitment of students to Concordia University's Campaign for the New Millennium. Eligibility: Available to students studying full- and part-time in the Faculties of Arts and Science, Commerce and Administration, and Fine Arts.

Harry and Grace Colle Scholarship: Established in 1986 through a bequest to Concordia University by Mrs. Grace Colle, the awarding of this scholarship continues the lifelong interest of Harry and Grace Colle in the education of young individuals. Eligibility: Open to all full-time students.

Concordia University Part-time Scholarships: A number of scholarships are available to students who are continuing their studies on a part-time basis. To be eligible for these scholarships, students must have successfully completed at least 12 credits, but no more than 24 credits, and be registered as a part-time student for the upcoming academic year. The value of the scholarship is dependent upon the number of credits the recipient is registered for at the time of selection in September for the Fall and Winter semesters.

Concordia University Alumni Association, Inc. Scholarship: Established in 1993 through the generous support of Concordia University Alumni. This fund supports a number of scholarships. Eligibility: Open to all full-time students in any faculty.

Concordia University 25th Anniversary Scholarship: Established on the occasion of the 25th Anniversary of the creation of Concordia University to celebrate and mark this event for posterity. The scholarship recipient will be selected by the Undergraduate Scholarships and Awards Committee. Eligibility: Available to Canadian Citizens, Permanent Residents and International students and awarded in recognition of academic achievement to undergraduate students without restriction to their field of study.

Brian T. Counihan Scholarship for Outstanding Contribution to Student Life: Established in 1995 in honour of Brian T. Counihan's contributions to student life over his 25-year tenure as the first Dean of Students of Concordia University. Eligibility: Awarded, at the discretion of the Undergraduate Scholarships and Awards Committee and upon recommendation by a staff member, in recognition of contribution to student life and academic achievement, to undergraduate students, without restrictions to the level of study, student status, or citizenship. Candidates will be required to have completed one full academic year or equivalent and have a minimum GPA of 3.30.

Friends of Concordia Scholarship: Established through contributions from various foundations, corporations, alumni, members of the University community, and Friends of Concordia. This fund also includes contributions from the American Association of Cost Engineers. Eligibility: Awarded, at the discretion of the Undergraduate Scholarships and Awards Committee, in recognition of academic achievement, to undergraduate students, without restriction to their field of study.

Henry F. Hall Scholarship: Established in 1982 by the faculty and staff of Sir George Williams University in recognition of the many years of service given to the University by the late Dr. Henry F. Hall. Eligibility: Awarded annually on the basis of merit to a full-time student.

Hellenic Students' Association Scholarship:* Established in 1988 by the Hellenic Students' Association of Concordia University. Eligibility: Open to all Canadian Citizens, Permanent Residents, or International students who can demonstrate Greek ethnic origin by providing an English copy of the applicant's and/or applicant's parents' birth certificates. Candidates must advise the Director of Financial Aid and Awards in writing, and provide their Concordia University I.D. number and supporting documents no later than August 1 for consideration in the following academic year.

Bill Hunt Memorial Scholarship: Established in 1977 in memory of the late Bill Hunt, a graduate of Sir George Williams University, by friends and associates from the YMCA, where Mr. Hunt was a social worker. Mr. Hunt was interested in the rehabilitation of adolescents who had dropped out of school. Eligibility: Open to all full-time students, and meant to help students who are attempting to re-establish their lives and their education.

Leslie and Kaye Jowett Scholarship: Established in 1989 through the generosity of E. Leslie Jowett, a former Sir George Williams College student who returned to the University following his retirement and graduated from the Faculty of Fine Arts in 1982. Eligibility: Awarded annually to full-time students, without restriction to their field of study.

Meloche Monnex Inc. Scholarship: Established by J. Meloche Inc., a leading insurance broker, this non-renewable scholarship will be awarded on the basis of academic merit. Eligibility: Awarded annually to a full-time student who has completed at least 24 credits at Concordia University, and without restriction to his/her field of study.

Nicholas Racz Memorial Scholarship: Established by the friends and associates of Nicholas Racz in a tribute to his character and indomitable spirit. In his life he gave much of himself to those around him, and his friends felt that it would be fitting that his sense of caring for others be continued through the implementation of this scholarship. Eligibility: Awarded annually to full-time students, without restriction to their field of study.

Lucien N. Rossaert Memorial Scholarship: Established in 1989 by friends and colleagues in memory of Mr. Rossaert, former Vice-Chair of the Conseil Supérieur de L'Éducation. Eligibility: Open to all students.

William Schiff Scholarship: Established by the Senior Students' Appeal Committee in 1988 in honour of the late William Schiff, an active senior student, and a founding member of the Sparklers Club. Eligibility: Available to a Senior full- or part-time student who is 55 years of age or over. The scholarship is not renewable and can only be awarded to a student once.

Susan Levin-Woods Scholarship:* Established in 1988 by Susan Levin-Woods, a graduate of Concordia University. Eligibility: Awarded annually to a Canadian woman who has demonstrated excellence in her studies and who is pursuing a degree on a full- or part-time basis while following a career path or bringing up a family. The recipient must have completed 30 credits towards her degree. Application forms are available at the Financial Aid and Awards Office, and must be submitted before August 1.

Open to Students in the Faculty of Arts and Science

Applied Human Sciences

*A. Ross Seaman Memorial Scholarship**: Established in 1987 to honour the memory of A. Ross Seaman for his life-long dedication to the communities of Concordia University, Dawson College, Kamp Kanawana and the YMCA. Each year, students from these four institutions are recognized for their leadership and scholarship. Eligibility: Students can apply or be nominated. Application information is available from the Department of Applied Human Sciences at Concordia University.

Communication Studies

*Mix 96 — Nick Auf der Maur Memorial Scholarship**: Established in 1989 by Mix 96 radio station to promote studies in the fields of Communication Studies and Journalism. Eligibility: Awarded to second-year students in Journalism or Communication Studies (in alternate years), exhibiting an interest in radio broadcasting. Interested candidates should contact the Chair of the Department of Journalism or Communication Studies by January 31: (514) 848-2555.

Economics

The Anne M. Galler Memorial Scholarship: Established in February 2000 by Mr. Mark Galler in the memory of his wife, Mrs. Anne M. Galler. Eligibility: Available to deserving full- or part-time students in the Department of Education who have completed a minimum of 30 credits in the Child Studies Program.

*John W. O'Brien Scholarship**: Established in 1984 to honour Dr. John W. O'Brien, first Rector of Concordia University, for his contribution to Sir George Williams University and Concordia University. Eligibility: Restricted to students entering the Honours Program. Interested candidates may contact the Chair of the Department of Economics in May of each year: (514) 848-3900.

English

*Compton-Lamb Memorial Scholarship**: Established in 1974 in memory of the late Neil Compton and Sidney Lamb by faculty members in the English Department of Sir George Williams University. This scholarship is intended to recognize an outstanding Honours student in the English Department. Eligibility: The recipient must be entering the final year of an Honours program. This includes students in the English Literature and the joint Honours in English and Creative Writing Programs. Students must submit a copy of their record and an essay written for an English Literature course. Deadline for submission of said essay to the Department of English is February 28.

History

*McGrath-Smith Memorial Scholarship**: Established in 1981 in memory of the late Warrant Officer, P.J. McGrath, RCAF, and Sergeant F.W. Smith, RAF, who gave their lives in combat in 1942 during an anti-submarine flight operation. Eligibility: Open to all full-time students and awarded to the student who attains the highest grade in the History of Canada HIST 203/205. The recipient is chosen upon the recommendation of the Chair of the Department. For further information, contact the Chair of the History Department by May 31.

Humanities

BPW Montréal Judith Litvack Women's Scholarship: Established in 1998 through the generosity of the Business and Professional Women's Club (BPW) to provide for an annual in-course scholarship. The scholarship is funded by an endowment from the late Judith Litvack, who was once a student at Concordia University. The Business and Professional Women's Club of Montréal is one of the oldest women's organizations in Montréal. Created in 1926, the organization belongs to the Québec, Canadian and International Federations of Business and Professional Women's Clubs. The BPW promotes women's self-reliance and financial independence. Eligibility: These non-renewable scholarships are awarded by the Undergraduate Scholarships and Awards Committee on the basis of academic achievement to either full- or part-time students who have completed at least 24 credits at Concordia University, and are open to all full- and part-time female students in the Faculty of Arts and Science enrolled in the Humanities or Social Sciences.

Journalism

Canadian Corporate News Scholarship: Established through the generosity of Canadian Corporate News, which distributes news releases to the media and investment community. Canadian Corporate News also publishes directories under the name of Matthews Media directories. Eligibility: Available to a scholastically deserving full-time undergraduate student pursuing a Major in Journalism.

Canadian Women's Press Club (Montréal Branch) Scholarship: Established in 1976 by the Canadian Women's Press Club (Montréal branch) to promote studies in the field of Journalism. Eligibility: Open to any student, full- or part-time, entering the second-year of the Journalism program.

*Al Cauley — CJAD Electronic Journalism Grant**: Established in 1982 by CJAD radio station to honour longtime Montréal broadcaster Al Cauley. Eligibility: Awarded annually to a second- or third-year student enrolled in the Journalism program, who shows potential for a career in broadcast journalism. This award is given in April, and is non-renewable. Applications should be made to the Director of the

Department of Journalism, and should include a description of the applicant's broadcast activities and interests, a copy of his or her transcript, and a short demonstration tape (audio/video).

Mathematics and Statistics

Axa Canada Scholarship: Established by Axa Canada Inc. in 1999. This scholarship recipient is selected by the Undergraduate Scholarships and Awards Committee on the basis of academic merit. Eligibility: Open to full-time students pursuing a Specialization or Honours program in Actuarial Mathematics. Students must have completed one full year of study in the program.

Modern Languages and Linguistics

Carmine Di Michele Scholarship: Established in 1982 in honour of Carmine Di Michele, a faculty member of the Department of Modern Languages. Eligibility: Open to all students whose Major is Italian. The award is granted upon the recommendation of the Chair of the Department of Modern Languages and Linguistics.

Philosophy

Ada Israel Memorial Scholarship: Established in 1986 by the family of the late Ada Israel, a student at Concordia University. Eligibility: Open to full-time students in the Philosophy Department who have completed at least 24 credits in Philosophy and who have made a contribution to the Concordia University philosophy community. Selection is made by the Chair, in consultation with the Department's Undergraduate Studies Committee.

Political Science

Political Science Jean H. Picard Foundation Scholarships:* A number of scholarships are available to Political Science students. Interested students should contact the Chair of the Political Science Department by January 15: (514) 848-2105.

Zeidan Family Scholarship:* Established in 1994 by Mr. and Mrs. Omar Zeidan, this scholarship is open to students in the Faculty of Arts and Science who have successfully completed a course in Middle Eastern Studies. Eligibility: The recipient will be selected on the basis of an essay of approximately 3,000 words on the theme "Arab/Islamic Canadian Relations." Students interested in submitting an essay must notify the Chair of the Political Science Department by February 1 and present the completed essay to the Chair of the Department by March 1.

Psychology

Lucille Irvine Memorial Scholarship: Established in 1967 by Mrs. William Broidy in memory of the late Lucille Irvine, a devoted teacher and former member of the staff of Sir George Williams University. Eligibility: Open to any full-time student in the Department of Psychology upon the recommendation of the Department.

Professor Joseph P. Zweig Scholarship: Established in 1981 in recognition of the contribution of Professor Zweig to Sir George Williams University and Concordia University in teaching and student services during his 43-year association with both universities. Eligibility: Awarded on the basis of high scholastic achievement, and a substantial contribution by a student studying in the areas of Psychology of Fitness, Exercise Science, and/or Behavioural Medicine. The candidates will be nominated by Faculty members in the Psychology Department involved in these areas.

Women's Studies

The Griffintown Award: The Griffintown Award has been created to further both women and Women's Studies. Eligibility: This award, based solely on academic merit, is awarded to a full-time student pursuing a Specialization in Women's Studies who has completed his/her second or final year of the program and who has achieved the highest grade point average.

Maïr Verthuy Scholarship: Established in 1985 by colleagues and associates to honour Maïr Verthuy, a professor at Concordia University. Eligibility: Open to an undergraduate student whose Major is Women's Studies. The recipient must have completed 60 credits with a minimum overall GPA of 3.00, of which at least 30 credits must be in Women's Studies, with a minimum GPA of 3.50.

Open to Students in the Faculty of Commerce and Administration

Stacie Lee Bessner Memorial Scholarship: Established in 1978 by the Bessner family in memory of their daughter Stacie Lee. Eligibility: Open to any full-time student.

Gunther Brink/Petro-Canada Scholarship: Established in 1989 by Petro-Canada in honour of Gunther Brink, a retired faculty member in the Faculty of Commerce. Eligibility: Open to any full-time student.

Commerce and Administration Students' Association Scholarship:* Established in 1990 by the Commerce and Administration Students' Association. Eligibility: Open to all full- and part-time students, these scholarships are awarded on the basis of scholastic performance and contribution to the Faculty of Commerce and Administration student life. Applications are available from the Financial Aid and Awards Office and must be returned by September 15.

Great-West Life Business Education Awards: Established in 1999 through the generosity of the Great-West Life Insurance Company. Eligibility: Available to all full-time Commerce and Administration students who have completed a minimum of 24 credits at Concordia University and have maintained a minimum GPA of 3.30. Preference will be given to students who can demonstrate ongoing involvement in community volunteer work.

Magnus Flynn Scholarship: Established in 1983 to honour Magnus Flynn for his years of devotion to Sir George Williams University and Concordia University. Eligibility: Granted to a Commerce student with high academic standing, who has made a strong contribution to student life. The award is based on the recommendation of the Dean of the Faculty.

P.T.R. Pugsley Memorial Scholarship: Established in the 1960s by friends of the late Professor Pugsley to commemorate his many years of service as senior professor in the Faculty of Commerce at Sir George Williams University. Eligibility: Awarded annually to an outstanding student in the Faculty of Commerce and Administration.

Accountancy

Arthur Andersen and Company Scholarship: Established in 1976 by the Chartered Accountant firm of Arthur Andersen and Company. Eligibility: Awarded to a Commerce student entering his/her final year and whose Major is Accountancy. Students must have a good academic record, and demonstrate leadership qualities in the classroom as well as in student activities.

Howard Gilmour Scholarship: Established by Mr. Gilmour's partners at Richter, Usher and Vineberg, Chartered Accountants. Eligibility: Awarded annually to a Commerce student whose Major is Accountancy, and who is entering the second year of the program.

Raymond, Chabot, Grant Thornton Scholarship:* Established in 1989 by Raymond, Chabot, Grant Thornton, Chartered Accountants to encourage and reward outstanding Accounting students, this award includes a 13-week summer job, offering on-the-job training, plus a scholarship. Eligibility: Awarded to a full-time, second-year bilingual Commerce student whose Major is Accountancy. The scholarship is based on the student's academic performance, top decile ranking in Accounting courses, and participation in on- or off-campus activities. Application forms are available from the Financial Aid and Awards Office. The deadline is November 30.

Shell Canada Limited Recruitment Scholarship:* Established in 1998 through the generosity of Shell Canada Limited to provide for an annual in-course scholarship. Eligibility: This non-renewable scholarship is based on the student's academic achievement. It is awarded to a full-time undergraduate student whose Major is Accountancy or Marketing, who has completed at least 30 credits, and who can demonstrate participation in extra-curricular activities.

International Business

Peter Glasheen Memorial Scholarship: Established in 1986 by friends, associates, and family of the late Peter Glasheen as a tribute to the spirit of his life — a major aspect of which was his abiding commitment to young people, their education, and their future. Eligibility: Open to students in the International Business Program, Faculty of Commerce and Administration.

Marketing

Le Château Stores Scholarship: Established in 1976 by Le Château Stores of Canada Limited. Eligibility: Open to all full-time students in the Faculty of Commerce entering their final year of study, and specializing in Marketing.

Joanisse Marketing Communication Scholarship: Established in 1987 in memory of the late Ian Roberts, founder and President of Ian Roberts Inc. Eligibility: Open to a Commerce student whose Major is Marketing, and who is entering his/her final academic year. The recipient must have completed the "Advertising and Sales Promotion Management" course (MARK 453). The recipient will be nominated by the Chair of the Marketing Department to the Undergraduate Scholarships and Awards Committee.

Shell Canada Limited Recruitment Scholarship:* Established in 1998 through the generosity of Shell Canada Limited to provide for an annual in-course scholarship. Eligibility: This non-renewable scholarship is based on the student's academic achievement. It is awarded to a full-time undergraduate student whose Major is Accountancy or Marketing, who has completed at least 30 credits, and whose participation in extra-curricular activities has been demonstrated.

Open to Students in the Faculty of Engineering and Computer Science

James McQueen Scholarship: Established in 1979 by the family of the late James McQueen as a tribute to his interest in education and higher learning. Eligibility: Open to all students in the Faculty of Engineering and Computer Science.

Richard Laurence Weldon Scholarship: Established in 1969 through the estate of Richard Laurence Weldon. Eligibility: Awarded annually to a student in the Faculty of Engineering and Computer Science at the discretion of the University Scholarships and Awards Committee.

Jaan Saber, Phoivos Ziogas Memorial Scholarship: Established in 1998 by a former student and friend of Professors Jaan Saber and Phoivos Ziogas to honour their memory and continue their traditions of engineering excellence. Eligibility: This non-renewable scholarship is awarded by the Undergraduate Scholarships and Awards Committee on the basis of academic achievement to full-time students who have completed at least 24 full-time credits during the previous academic year at Concordia University. This award is open to all full-time students in the Faculty of Engineering and Computer Science.

Building Engineering

Magil Construction Ltd. Scholarships: A number of in-course scholarships are available through the generous support of Magil Construction Ltd. Eligibility: Open to all full-time undergraduate students in Building Engineering, and to students who have completed between 35 and 70 credits in the Building Engineering program. The recipients will be selected by the Chair of their respective programs on the basis of academic excellence.

Computer Science

Corporate Software & Technologies Scholarship: Established in 1996 to support a deserving undergraduate student in the Department of Computer Science. The recipient will further have an offer of summer employment with the Corporate Software & Technologies company. Eligibility: Open to full-time undergraduate students in the Faculty of Engineering and Computer Science, Department of Computer Science.

Department of Computer Science Scholarship: Established in 1996 by Dr. Clement Lam to recognize an outstanding student registered in the Department of Computer Science. Eligibility: Awarded to the highest ranked full-time undergraduate student in the Department of Computer Science who has completed a minimum of 50 credits.

Saco Smartvision Scholarship: Established in 1999 through the generosity of Saco Smartvision Inc. to provide for one annual in-course scholarship in the Faculty of Engineering and Computer Science. This scholarship recipient is selected by the Undergraduate Scholarships and Awards Committee on the basis of academic merit. Eligibility: Open to full-time students upon the completion of their first year of study in Electrical Engineering, Mechanical Engineering, or Computer Science.

Shell Canada Limited Recruitment Scholarship:* Established in 1998 through the generosity of Shell Canada Limited to provide for an annual in-course scholarship. Eligibility: This non-renewable scholarship is based on the student's academic achievement. It is awarded to a full-time undergraduate student in Computer Science or Electrical Engineering, who has completed at least 30 credits, and can demonstrate participation in extra-curricular activities.

Civil Engineering

Magil Construction Ltd. Scholarships: A number of in-course scholarships are available through the generous support of Magil Construction Ltd. Eligibility: Open to all full-time undergraduate students in Civil Engineering, and to students who have completed between 35 and 70 credits in the Civil Engineering program. The recipients will be selected by the Chair of their respective programs on the basis of academic excellence.

Electrical and Computer Engineering

Saco Smartvision Scholarship: Established in 1999 through the generosity of Saco Smartvision Inc. to provide for one annual in-course scholarship in the Faculty of Engineering and Computer Science. This scholarship recipient is selected by the Undergraduate Scholarships and Awards Committee on the basis of academic merit. Eligibility: Open to full-time students upon the completion of their first year of study in Electrical Engineering, Mechanical Engineering, or Computer Science.

Shell Canada Limited Recruitment Scholarship:* Established in 1998 through the generosity of Shell Canada Limited to provide for an annual in-course scholarship. Eligibility: This non-renewable scholarship is based on the student's academic achievement. It is awarded to a full-time undergraduate student in Computer Science or Electrical Engineering, who has completed at least 30 credits, and can demonstrate participation in extra-curricular activities.

Julian C. Smith Memorial Scholarship: Established in 1997 by the Board of Directors of the Julian C. Smith Memorial Fund Corporation to honour the life and contributions of Julian C. Smith, who until his death in 1939 was the President of Shawinigan Water & Power. Eligibility: Granted annually to a second- or third-year student in Electrical Engineering.

SR Telecom Scholarship: Established in 1993, this scholarship is funded by an endowment provided by SR Telecom Inc. Eligibility: Open to an undergraduate student in Electrical Engineering.

Silas Katz Memorial Scholarship:* First awarded in 1984, this scholarship was made possible through donations from faculty, students and staff, in memory of the late Dr. Silas Katz, Professor of Mechanical Engineering. Eligibility: Open to students in Mechanical Engineering. Consideration will be given to those students who are mature, self-supporting, and who maintain a good academic

performance and have completed between 30 and 90 credits. Selection is made by an Advisory Committee to the Chair. Recipients are notified in October. The award is renewable if the student maintains the criteria. Contact the Chair, Department of Mechanical Engineering for information.

Mechanical Engineering

Saco Smartvision Scholarship: Established in 1999 through the generosity of Saco Smartvision Inc. to provide for one annual in-course scholarship in the Faculty of Engineering and Computer Science. This scholarship recipient is selected by the Undergraduate Scholarships and Awards Committee on the basis of academic merit. Eligibility: Open to full-time students upon the completion of their first year of study in Electrical Engineering, Mechanical Engineering, or Computer Science.

Open to Students in the Faculty of Fine Arts

Faculty of Fine Arts Development Fund Scholarships: The Faculty of Fine Arts offers a number of in-course scholarships, made possible by donations to its Faculty Development Fund. Eligibility: Awarded on the basis of academic achievement to second- and third-year students in the Faculty of Fine Arts (i.e. those having completed 24 credits or more).

Ruth Louise Vaughan Memorial Scholarship: Established in 1984 by the Vaughan Family in memory of their sister and daughter. Eligibility: Awarded annually to a student in the Faculty of Fine Arts.

Art Education

Anne Savage Memorial Scholarship: Anne Savage was a pioneer Canadian art educator and painter who died in 1971. She was an important influence on the founders of the art education program at Sir George Williams University. The Anne Savage Memorial Scholarship was initiated after her death with contributions made in her memory by friends and former students. In making this award, the Art Education Department of the Faculty of Fine Arts hopes to carry on the tradition of dedication, innovation and quality established by Anne Savage in her lifetime and to assist students preparing for careers as art teachers. Eligibility: This scholarship is awarded annually to an outstanding student in Art Education. Recipients are selected on the basis of artistic and academic achievement and commitment to the vocation of teaching.

Cinema

Philip Russel George Award: One of several staff- and faculty-supported awards, this was established to honour a student in the Film Production Program. Eligibility: Selection is done exclusively by the School of Cinema.

Kodak Scholarships:* Awarded annually to Cinema students on the basis of outstanding performance in Film Production. Selection is done exclusively by the School of Cinema.

Heather Walker Memorial Scholarship: Established in 1995 by the Faculty of Fine Arts through the donations of colleagues and friends. Heather Walker was an academic adviser in the Office of Student Affairs and she represented our best attitude toward students. She graduated with a BFA in Cinema in 1980, and obtained a second BFA in Photography in 1988. Heather pursued successful artistic activities in Photography and was dedicated to humanitarian organizations such as *Families for Children, Development and Peace* and *H.O.P.E.* Eligibility: Awarded annually to a full- or part-time student in one of the programs offered in Cinema or Photography. The recipient is selected on the basis of artistic and academic achievement, and on commitment to humanitarian activities.

Sean Wall Scholarship: Established in 1992 by his parents, Deanna and Ted, and his brothers, George and Wilder, as tribute to Sean Wall who was a promising young Film Production student at Concordia University. Eligibility: Awarded annually to the most outstanding Cinema student entering second year. Selection will be made by the School of Cinema on the basis of work completed during the first year at Concordia University.

Music

The Robert Ball Memorial Scholarship: Established in 1999 in memory of Robert Ball, a student of Music at Concordia University. Robert Ball was a remarkable individual who never let his illness get him down; he always maintained a sense of self-worth and optimism. Eligibility: Selection is performed by the Faculty of Fine Arts, Department of Music. Open to deserving full-time students in their third year who have demonstrated a sensitivity to the world in some notable fashion, either by helping others or through overcoming some personal obstacle.

Studio Arts

Cecil Buller – John J.A. Murphy Scholarship in Drawing: Created in 2000 through the generosity of Dr. Sean Murphy, a member of Concordia's Fine Arts Advisory Board, in honour of his parents, Cecil Buller and J.A. Murphy, to encourage students who show exceptional promise in traditional drawing. The scholarship is awarded either at the undergraduate or graduate level, as determined by the Faculty, on a rotational basis. Eligibility: Open to both full-time and part-time students enrolled in a Studio Arts program. Recipients are selected based on recommendation of the Faculty of Fine Arts, and can be reconsidered in subsequent years.

Robert Langstadt Memorial Scholarship: Established by Mrs. Anne Kahane Langstadt in memory of her husband. Anne Kahane and Robert Langstadt are former professors in the Faculty of Fine Arts. Eligibility: Awarded annually to a full-time undergraduate student whose Major is Painting and Drawing or Studio Arts. The recipient must be entering his/her second or third year of study in the program. This award is alternated between Studio Art and Painting and Drawing on an annual basis.

Norman McLaren Film Animation Scholarship: Established in 1981 by the late Norman McLaren, an animation film-maker. Eligibility: Awarded to a Film Animation student. Selection is done exclusively by the School of Cinema.

Stevenson Colour Scholarship: Established in 1991 by the Stevenson family in memory of David L. Stevenson, founder of Stevenson & Son Co. Ltd. Eligibility: Two scholarships are available to students in the Faculty of Fine Arts, whose Major is Painting and Drawing.

300.4 CONCORDIA UNIVERSITY COLLEGE SCHOLARSHIPS

Liberal Arts College

Liberal Arts College Scholarships: The Liberal Arts College administers several scholarships that are awarded annually. These awards are made possible by donations from friends of the Liberal Arts College, and are based upon high academic performance in Liberal Arts courses. Renewal is possible providing the student maintains the criteria for the award. These awards are:

- Liberal Arts College Scholarship
- Frances and David Rubin Scholarship
- Thomas More Scholarship
- George Rudé Scholarship

Lois and Stan Tucker Scholarship: Established in 1993 by Lois and Stan Tucker who believe that the love of learning and the development of intellectual curiosity constitute the basis for a fulfilled life. For further information, contact the Principal, Liberal Arts College: (514) 848-2565. Eligibility: Open to students enrolled in the Liberal Arts College.

Loneragan University College

Mark Doughty Scholarship and Award: Awarded annually to a student who is a member of the Loneragan University College, upon the recommendation of the Principal and the College Council. To be eligible for the scholarship, students must have completed a minimum of 18 credits at Loneragan University College. Recipients are selected on the basis of academic excellence and their contribution to the intellectual and social life of the College. For further information, contact the Principal, Loneragan University College: (514) 848-2280.

300.5 AWARDS AND PRIZES

Administrative Management Society Award:* Established by the AMS in memory of John Crawford and in honour of past presidents, this award will be made in alternate years to an undergraduate student in the Department of Education. This award will be based solely on academic merit. Eligibility: Interested candidates should contact the Chair of the Department of Education: (514) 848-2004.

Alain Award in Electroacoustics:* Established in 1985, this award is granted annually to a student who demonstrates commitment and ability in the field of electroacoustics. Eligibility: Open to students registered in an Electroacoustics course in the preceding academic year, within the Music Department of the Faculty of Fine Arts. Interested candidates should contact the Chair of the Music Department: (514) 848-4705.

Bauer Inc. Women's Hockey Awards: Established in 1998 through the generosity of Bauer Inc. to provide for two annual in-course awards. Eligibility: These non-renewable awards are awarded on the basis of academic achievement to either full-time or part-time students who have successfully completed at least 18 credits at Concordia University in the previous academic year. The awards are open to all full- and part-time CIAU-eligible student athletes who are members of the Concordia University Women's Hockey team.

Brenda Carter Memorial Award:* Established in memory of Brenda Carter by her husband, David Wheeler, Professor Emeritus at Concordia University, as well as by friends and colleagues. Brenda Carter was a dedicated educator and elementary school principal until ill health forced her retirement. Without formal mathematical processes and procedures, and while not a doctrinaire feminist, she very much wanted many more women to find the keen pleasure in mathematics that she found. Eligibility: Awarded annually to a female registered in a graduate or undergraduate program in Mathematics. Preference will be given to a candidate who meets some or all of the following criteria:

- demonstrates a proven interest in teaching;
- has returned to academic study after an interruption;
- has overcome some particular handicap or obstacle (e.g. in academic background, health or financial security);
- is active in a social, political or professional organization.

Students wishing to apply for this award should contact the Secretary to the Chair, Department of Mathematics, Loyola Campus, Room HB 236: (514) 848-3223. The deadline is December 15.

*Richard M. H. Cheng Award**: Established by the family of Professor Cheng to commemorate his 25 years of service at Concordia University and to promote the concept and practice of engineering design among young mechanical engineers. Selection of the award will be made by an Advisory Committee to the Chair, Department of Mechanical Engineering, and the criteria of excellence will include evidence of creativity, usefulness, detailed design, reporting and presentation. Eligibility: Awarded annually to a full-time undergraduate student, or group of students, of the Mechanical Engineering program who is judged to have demonstrated excellence in a student project that is devoted to open-ended engineering design.

Harry Clinch Book Prize: Established in 1982 by friends and colleagues to honour retiring Professor Harry Clinch, founder of the Geography Department. Eligibility: Open to all full-time students in the Geography Department. Selection is done by the Chair of the Department.

Lindsay Crysler Award: Established by students, colleagues and friends in honour of Professor Lindsay Crysler, longtime teacher and Director of the Department of Journalism, on the occasion of his retirement. Eligibility: Open to all students entering the first year of undergraduate studies within the Department of Journalism. Selection will be made by a Committee of the Department, which will take into consideration the following material extracted from the student's application for admission: 1. Transcript of marks; 2. The "letter of intent"; 3. The English proficiency scores. For further information, students should contact the Department of Journalism: (514) 848-2465.

*Ann Duncan Award for the Visual Arts**: Established in 1997 by the Leonard & Bina Ellen Art Gallery to honour the memory of Montréal art critic Ann Duncan, who, through her writings on the arts, played a significant role in supporting the work of artists in the early stages of their careers. Used to fund an internship at the Ellen Art Gallery, the Ann Duncan Award for the Visual Arts will allow a student to pursue a research project in his/her area of interest. The project should reflect the museological activities of an art institution dedicated to the collection, presentation and interpretation of Canadian art. Eligibility: Awarded annually to a full-time undergraduate student enrolled in a program in the Department of Studio Arts and/or Art History who has completed a minimum of 24 credits and maintained a minimum B+ average at Concordia University.

Dr. Ed Enos Athletic Excellence Award: Established in 1998 through the generosity of family and friends on the occasion of Dr. Ed Enos' induction into the Concordia University Sports Hall of Fame. Awarded by the Undergraduate Scholarships and Awards Committee with the assistance of the Director of Recreation and Athletics and in compliance with CIAU regulations. Eligibility: Granted to a full-time student whose Major is Exercise Science, on the basis of academic and athletic merit.

*Henry Gamer Award for Acting**: Established in 1991 by Mrs. Sarah Gersovitz in the name of her brother, the actor Henry Gamer. The intent of the award is to recognize the most outstanding single performance each year by a graduating theatre student. Eligibility: Open to a full-time student in Theatre.

*Garnet Menger Award**: Established in 1990 in memory of the notable musician and teacher, Garnet Menger. This award is given annually to an outstanding student in any Department of Music program. The award acknowledges accomplishment in both academic and student life activities. Application forms are to be accompanied by two letters of reference from full- or part-time faculty in the Department of Music and are available from the Department of Music. The scholarship is awarded in May of each year, and the deadline for applications is April 15.

*Cynthia Gunn Journalism Award**: Established in 1981 by family and friends to honour the memory of the late Cynthia Gunn, a reporter with *The Montreal Star* and *The Gazette*. Eligibility: Open to all prospective journalists enrolled in a second- or third-year Journalism program who are full- or part-time students. Applicants are judged on the basis of marks, published work (if any), and written work produced for Journalism workshops. Applications must be made to the Director of the Department of Journalism, and must include a current transcript, two samples of written class work, and two samples of published work.

*Irving Layton Award for Creative Writing**: Established in 1988 by the Department of English, with the support of friends and colleagues, to honour one of Montréal's, and Canada's, finest poets. Irving Layton's association with Concordia University includes many years as a generous and inspiring teacher, distinctive service as writer-in-residence on several occasions, and Adjunct Professor of English. Eligibility: Open to students who are completing the last 30 credits of their program, and who have demonstrated excellence in the writing of poetry, fiction, or drama. For further information and application forms, contact the Chair of the Department of English: (514) 848-2340 or 848-2320.

*Graham Marks Memorial Award**: Established in 1985 by Ester Spevack Marks in memory of her late husband, Graham Marks, who, after spending a lifetime building a successful retail business, returned to University to complete a degree in Human Social Science and entered the counselling profession. Eligibility: Open to part-time students who show promise in their studies, but who, because of financial

circumstances, are unable to attend the seminar program of the Centre for Human Relations and Community Studies. For an application, contact the Director of the Centre by January 31: (514) 848-2273.

Peter Matthews Memorial Award: Established in 1987 by his family to honour the memory of Peter Kent Matthews, who passed away in 1986. Eligibility: Available to all full-time Computer Science students who have completed a minimum of 30 credits in the program, and are entering the second or final year of their undergraduate program, or entering the first or second year of a Master's program. Candidates must demonstrate community service and involvement in addition to academic excellence. Application forms are available at the Financial Aid and Awards Office. Application deadline is August 15. Recipient selection is done by the Faculty of Engineering and Computer Science.

The Helen McNicoll Art Prize Established by Betty Ann Elliott: Established in 1975 in honour of Helen Galloway McNicoll, an impressionist painter, born in Toronto in 1879, died in Dorset, England in 1915. The prize was established by her niece, the late Betty Ann Elliott, to honour the work of this profoundly original and technically accomplished Canadian artist. Eligibility: This prize is awarded in alternate years to third-year students in Visual Arts and Art History who have shown exceptional talent. Selection is made upon the recommendation of the Faculty of Fine Arts.

Louis Muhlstock Drawing Prize:* Established in 1984 by Mr. Muhlstock to recognize the outstanding accomplishments of Fine Arts students. Eligibility: Open to a full-time undergraduate Fine Arts student whose Major is Painting and Drawing or Studio Arts. The award will be given on the basis of artistic talent to students who are registered in one of the 300- or 400-level Drawing courses. For further information and an application, contact the Chair of the Department of Studio Arts: (514) 848-4262.

Frank B. Walker Journalism Awards:* Established in 1995 to honour the memory of the late Frank Walker (1916-1985), editor-in-chief of *The Montreal Star* from 1968 to the paper's close in 1979. Eligibility: Two awards are made available to deserving students in the Department of Journalism to encourage and recognize excellence in writing. One award is available to a student completing the first year, and another to a student completing the second year of the Journalism program.

Heather and Erin Walker Humanitarian Award: Established in 1995 by the Faculty of Fine Arts through the donations of colleagues and friends to honour the memories of Heather Walker and her daughter Erin. An academic adviser in the Office of Student Affairs of the Faculty of Fine Arts, Heather Walker represented our best attitude toward students and both she and her daughter Erin were dedicated to humanitarian organizations such as *Families for Children, Development and Peace* and *H.O.P.E.* Eligibility: Awarded annually to a full- or part-time student enrolled in a Bachelor of Fine Arts. Selection is made by the Office of Student Affairs upon recommendation of full- or part-time faculty members, based on demonstration of humanitarian service while in pursuit of excellence in academic, artistic, and community service or related endeavours.

300.6 ENTRANCE BURSARIES

Concordia University Alumni Association Ottawa Chapter Entrance Bursary: Established in 1999 by the Ottawa Chapter of the Concordia University Alumni Association. This entrance bursary is application-driven and the selection is done by the Undergraduate Scholarships and Awards Committee. Eligibility: This non-renewable entrance bursary is open to all full-time newly admitted students to Concordia University who are permanent residents of the National Capital Region, or should there not be such a candidate, a permanent resident of Eastern Ontario or Western Québec. This bursary is awarded on the basis of financial need and satisfactory academic standing.

Howard Davidson Bursary:* Established in 1996 through the generosity of Howard Davidson, BComm, a graduate of Concordia University. Eligibility: This renewable entrance bursary is granted to a scholastically and financially deserving full-time undergraduate student in the Faculty of Commerce and Administration, preferably pursuing a Major in Accountancy. This bursary is renewable to a maximum of two additional years.

MAR-KIN Foundation Entrance Bursary: Established in 2000 through the generosity of the MAR-KIN Foundation to encourage full-time students who have limited financial resources to pursue undergraduate studies at Concordia University. These entrance bursaries provide coverage of annual tuition and fees, and textbook costs. They are available to Canadian Citizens who are considered to be Québec residents according to the definition used by the Ministry of Education. Students must enrol in a full course load, with a minimum of 15 credits in the Fall, and 15 credits in the Winter. Applicants must have completed their cégep studies in the year prior to applying for this bursary. Application forms are available from the Financial Aid and Awards Office. The deadline to submit applications is March 1. MAR-KIN Foundation Entrance Bursaries are renewable based upon successful completion of all courses, and continued registration of a full course load (30 credits) throughout the tenure of the award.

Carolyn and Richard Renaud Entrance Bursaries:* Established in 1998 through the generosity of Carolyn and Richard Renaud, these entrance bursaries will be offered to newly admitted undergraduate

students who are beginning, for the first time, a full-time program of study at the university level. The entrance bursary may be renewed if the candidate maintains satisfactory academic standing as per the University's academic regulations, as well as a full-time course load (24 credits) for each year in which the award is tenable. Each bursary may be renewed twice for a maximum of three years, except for students in programs of longer duration.

George and Henry Tutsch Entrance Bursary: Established in 1999 through the generosity of the family of George Tutsch. This bursary is dedicated to George Tutsch, a strong supporter of post-secondary education and continuing education programs, and Dr. Henry S. Tutsch, a former Commerce faculty member of Sir George Williams University and Concordia University. It is available to newly admitted full-time Commerce and Administration students pursuing a Minor in Entrepreneurship and Small Business Management and/or majoring or minoring in Management. This bursary is renewable twice for a maximum of three years based upon full-time status and academic achievement. Applicants must submit an essay which reflects an interest in and flair for entrepreneurship along with the application.

300.7 CONCORDIA UNIVERSITY IN-COURSE BURSARIES

Students must apply in order to receive in-course bursaries. The application form is available in the Financial Aid and Awards Office and completed applications should be returned to the Financial Aid and Awards Office by December, unless otherwise stated. The Financial Aid and Awards Office reserves the right to extend the application deadline to ensure that sufficient number of applications have been received.

The value of each award may fluctuate yearly depending upon current interest rates. Unless stated otherwise, awards are given to full-time students who are Canadian Citizens or Permanent Residents. Please note that award recipients may hold only one of the following types of awards in a given academic year:

- Concordia University Entrance Scholarships
- Concordia University In-course Scholarships
- Concordia University In-course Bursaries

Concurrent tenure of the aforementioned awards is not allowed unless expressly authorized by the University Undergraduate Scholarships and Awards Committee.

Open to Students in Any Faculty

All-Canadian Football Achievement Bursary: Created by Nestlé to recognize the outstanding performance of Canadian football players, this bursary is granted to an athlete who has at least one year of playing experience with the Concordia University football team. Eligibility: The recipient must have completed a minimum of 24 full-time credits at Concordia University, with a cumulative GPA of at least 3.30. This award is available to undergraduate or graduate students. For further details, see the Football Coach in Recreation and Athletics: (514) 848-3858.

Arab World International Bursary: Established in 1995 by Concordia University through the generosity of a number of Arab Gulf States. This bursary is intended to assist International students from the Arab world during their studies at Concordia University. Eligibility: Open to deserving International students who can demonstrate citizenship of any member state of the League of Arab States, or who, while stateless, reside in an Arab League state.

Association of Alumni of Sir George Williams University Bursaries: Established in 1988, through the generosity of the Association of Alumni of Sir George Williams University. Eligibility: Open to all full-time undergraduate students.

Birks Family Foundation Bursaries: The Birks Family Foundation has established a plan of annual contributions to the Student Aid Fund of recognized Canadian universities for the creation of the Birks Family Foundation Bursaries. These bursaries are awarded by the Foundation on the recommendation of the Bursary Selection Committee. They are not restricted to any faculty or course year, and may be renewed. The number and amount of awards may vary annually depending upon the funds available for this purpose from the Foundation.

Donald Buchanan Bursary: Established in memory of Donald Buchanan by friends in 1977. Eligibility: Open to all full-time undergraduate students.

Campaign for the New Millennium Bursaries: Established in 1999 through the generous commitment of students to Concordia University's Campaign for the New Millennium. Eligibility: Available to students studying full- and part-time in the Faculties of Arts and Science, Commerce and Administration, and Fine Arts.

Chadha Family Foundation's Indo-Canadian Award: Established in 1999 through the generosity of the Chadha family as part of a national project to mark a century of Sikh and Indo-Canadian presence in Canada. This anniversary coincides with the tricentenary of the Khalsa, the Sikh faith.

Eligibility: This renewable bursary is available to all full-time students. Preference will be given to students who were born in India or who have at least one parent or grandparent who was born there, or students who form a part of a historically disadvantaged group, that is, aboriginal people, visible minorities and persons with disabilities. Renewability is based upon full-time status and the student must maintain a minimum GPA of 2.75.

Concordia University Bursaries: Established in 1990 by Concordia University, these bursaries are available to full- and part-time students who are Canadian Citizens, Permanent Residents and International students.

Concordia University/Bank of Montréal Affinity Card Emergency Bursaries: Established from proceeds received from the Concordia/Bank of Montréal Affinity Credit Card, these bursaries will fund financially needy full-time undergraduate students.

Concordia University Shuffle In-course Bursaries: Established through the participation and generosity of the University Community and Friends of Concordia. The Concordia Shuffle consists of a fund-raising "Walk-a-Thon" each year between the Sir George Williams and Loyola Campuses of Concordia University. A number of bursaries are awarded on the basis of scholastic achievement combined with financial need. **Eligibility:** Open to full-time undergraduate students in any faculty including International students and disabled part-time students. Applicants must have completed at least one full-time term of study at Concordia University.

Concordia University Alumni Association, Inc. Bursaries: Established in 1993 through the generous support of Concordia University alumni. **Eligibility:** The fund supports a number of bursaries that are awarded to full-time students in any faculty who are deserving, scholastically and financially.

J.P. Copland Memorial Bursary: Established in 1972 by the family of J.P. Copland. **Eligibility:** Open to all full-time undergraduate students.

Cecilia Chrysler Bursary: Established by family and friends to honour a woman whose own aspirations to attend university were never fulfilled, but who subsequently became a friend and confidante to Concordia University students for over a decade. **Eligibility:** Awarded to a needy and deserving female first-year undergraduate student.

Crane Fund for Widows and Children Bursary: The Crane Fund for Widows and Orphans supports an annual bursary for Concordia University students. **Eligibility:** Open to all undergraduate students. Preference will be given to widows or orphans who display financial need.

Ecosense and Concordia University Alumni Association Inc. Bursary: Established by Ecosense (1978-91), a non-profit organization that actively promoted care of the environment, recycling, and the rational use and management of resources. Established also through a generous gift from the Concordia University Alumni Association, Inc. **Eligibility:** Proven active participation in promoting environmental awareness or improvement at the community level (i.e. involved in a grass roots movement such as QPIRG). The candidate should also demonstrate how he/she intends to orient his/her knowledge or degree towards improving the environment in the future. The candidate must be a full-time registered student at Concordia University in any field of study. The application should contain a copy of the student's curriculum vitae, a covering letter and a Concordia University transcript.

Friends of Concordia Bursary: Established through contributions from various foundations, corporations, alumni, members of the University community, and Friends of Concordia. Contributors to this award include endowment funds from Douglas Devenne, Bal Dobbs, Isidore Frishling, Dick MacDonald, Harry Pinker and Walter Stenhouse. **Eligibility:** Awarded at the discretion of the Undergraduate Scholarships and Awards Committee, in recognition of academic achievement, to undergraduate students.

The Brahm & Jo Jo Gelfand Bursary: Dedicated to Brahm and Jo Jo Gelfand, this bursary was established in 2000 through the generosity of the Carolyn and Richard Renaud Endowment with additional contributions from Brahm and Jo Jo Gelfand, and is intended for deserving undergraduate students in any faculty. **Eligibility:** Awarded on the basis of financial need and academic merit, The Brahm and Jo Jo Gelfand Bursary is open to Canadian and Permanent Resident students who have completed at least one year of full-time undergraduate studies in any faculty.

Peter Glasheen Memorial Bursary: Established in 1986 by friends, associates, and family of the late Peter Glasheen as a tribute to the spirit of his life, a major aspect of which was his abiding commitment to young people, their education, and their future. **Eligibility:** Open to all full-time undergraduate students.

Ellen Greenwood Ornstein Memorial Bursary: Established in 1991 in memory of Ellen Greenwood Ornstein by her family through the Henry and Bernice Kaufmann Foundation. Ellen Greenwood Ornstein graduated from the University in 1972. **Eligibility:** Awarded to a scholastically and financially deserving student.

F.P. Higgins Memorial Bursary: Established in 1991 by the late Francis Philip Higgins, this bursary is awarded to a francophone undergraduate student on the basis of scholastic achievement and

financial need. Eligibility: Applicants must submit a copy of their high school and cégep transcripts, showing they pursued their studies in French, along with their In-course Bursary application form.

Ralph B. Hood Memorial Bursary: Established in 1973 by the late Ralph B. Hood, with the intention of assisting needy and deserving young students. Eligibility: Open to all full-time undergraduate students.

Japanese-Canadian Bursary: Established in 1984 in memory of Japanese-Canadians who served in the Canadian Forces in World Wars I and II. Eligibility: Awarded to a needy and deserving undergraduate student.

Joseph Gilbert Joyce Memorial Bursary: Established in 1967 in honour of the late Reverend Joseph Gilbert Joyce who, during his 24-year ministry at Verdun United Church, maintained a deep interest in the evening division of the University. This bursary was established in accordance with his conviction that knowledge and higher education should be available to those who seek to make a creative contribution to the development of mankind. Eligibility: Awarded to a part-time undergraduate student, on the basis of academic standing, financial need, and promise in his/her chosen field of study.

T.J. Madden Bursary: Established by the Senior Students' Appeal Committee to honour the late T.J. Madden, a founding member of the Senior Non-Credit Program. Eligibility: This renewable bursary is awarded annually to a full-time, first-year undergraduate student. It is renewable twice for a maximum tenure of three years, provided the recipient maintains full-time status and achieves a GPA of no less than 3.0.

S.H. McNeilly Bursary: Established in 1963 by Mrs. Mary McNeilly in honour of her late husband, S.H. McNeilly. Eligibility: Open to all part-time students who can prove employment with the Canadian Pacific Railway Company. If no suitable candidates are found, it will be offered to other students.

Carolyn and Richard Renaud Bursaries: Established in 1998 through the generosity of Carolyn and Richard Renaud, these in-course bursaries are offered to full-time undergraduate students who have completed at least one semester of study at the University. These bursaries will be granted on the basis of scholastic merit and personal financial need. These bursaries are non-renewable, although recipients may apply in successive years.

Royal Albert Edinburgh Lodge Bursary: Established by the Royal Albert Edinburgh Lodge during the late 1960s. Eligibility: This bursary is awarded to (a) children of members of the Royal Albert Edinburgh Lodge, OR (b) children of members of other Masonic Lodges. If neither (a) nor (b) qualify, any worthy student may apply and receive this bursary at the discretion of the Bursary Selection Committee. Applicants will be required to demonstrate proof of (a) or (b) above.

St. Andrew's Society Bursary: Established in 1971 by the St. Andrew's Society of Montréal. Eligibility: This bursary is open to all full-time students. Applicants will be required to demonstrate proof of Scottish birth or ancestry.

Inge Thurm Memorial Bursary in Women's or Gender History: Established in 1997 through the generosity of friends and colleagues of Dr. Rosemary Schade on the occasion of her marriage. The bursary is named in honour of Dr. Schade's mother, Mrs. Inge Thurm. Eligibility: Awarded annually to a full-time undergraduate or graduate student (in alternating years) in the Department of History.

Nancy Torbit Memorial Bursary: Established in 1998 through the generosity of the family, friends and colleagues in memory of Nancy Torbit, former Director of Health Services. Eligibility: Open to all full-time students regardless of field of study.

University Women's Club of Montréal Bursary:* The University Women's Club of Montréal Public Foundation offers two bursaries to mature women who are enrolled in full-time undergraduate study at Concordia. Eligibility: Awarded to students who have completed preferably two years in an undergraduate program. Both financial need and academic standing are considered when determining the successful candidates. Application forms are available at the Financial Aid and Awards Office, and must be submitted by April 1.

Fred Weinstein Bursary: Established in 1997 as a bequest of Mr. Fred Weinstein. Eligibility: Open to all undergraduate students.

Open to Students in the Faculty of Arts and Science

Joel and Jeffrey Birenbaum Memorial Bursary: Established in 1972 in memory of Joel Birenbaum, a former student of Sir George Williams University, and renamed in 1992 in remembrance of Jeffrey Birenbaum, the father of Joel Birenbaum. Eligibility: Open to all full-time undergraduate students.

Ethel Campbell — P.E.O. Memorial Bursary: Established in 1967 by Colin C. Campbell in loving memory of his wife, Ethel May Routledge Campbell. Eligibility: Open to all full-time undergraduate female students.

Biology

Donald L. Peets Bursary: Established in 1990 in recognition of the contributions made by Donald L. Peets to student life and services during his many years of association with Sir George Williams

University and Concordia University as a teacher and administrator. Eligibility: Open to all full-time undergraduate students in the Biology Department.

Chemistry

Henry I. Chinks Memorial Bursary: Established in 1965 in memory of the late Henry I. Chinks, Vice-President, Avmor Ltd.. Eligibility: Preference is given to part-time Chemistry students.

English Literature

Arianne Johnston-Kip Little Memorial Bursary: Established in 1992 by family and friends in memory of Arianne Johnston and Kip (Christopher) Little, former English students at Concordia University. Eligibility: Open to all full-time undergraduate students in the English Department. Every second year, the bursary will be given to a mature student.

Geography

Maria Ildiko Beardsley Memorial Bursary: Established in 1997 by family and friends of Maria Ildiko Beardsley. Eligibility: Awarded to an undergraduate student in the Department of Geography pursuing full-time study in an Urban Studies program.

Journalism

Mix 96 — Nick Auf der Maur Memorial Bursaries: Established by Mix 96 in 1989 to reward students who show promise in their field of study, two bursaries will be awarded annually to one female and one male student in the Communication Studies or Journalism programs. Eligibility: Awarded on the basis of academic achievement and financial need. Applicants will be required to submit a short essay on the role of radio in the Montréal community. For further information, contact the Chair of either the Department of Communication Studies or Journalism: (514) 848-2465.

Nick Auf der Maur Award: Established in 1999, this award is available to deserving undergraduate students in the Department of Journalism, or the Department of Communication Studies. Eligibility: Open to students in a Major in either Journalism or Communication Studies, who have completed a minimum of 12 credits towards their Major. Applicants must provide a written personal statement indicating their special areas of interest, concerns, and personal motivation in the field of Journalism or Communications.

Philosophy

Ernest Haznoff Memorial Bursary: Established in 1964 in memory of the late Ernest Haznoff (BSc 1959). Eligibility: Open to any full-time undergraduate student pursuing a Major or Honours in Philosophy.

Political Science

Marjorie S. Dewitz Bursary: Established in 1988 by friends and colleagues of Marjorie Dewitz on the occasion of her 70th birthday. Eligibility: Awarded to a full-time female student who is a Canadian Citizen or a Permanent Resident, pursuing a Major in Political Science. The recipient will be selected by the Undergraduate Bursary Selection Committee on the basis of nominations received from the Chair of the Political Science Department.

Hannah Amiouny Bursary: Established in 1998 in memory of Hannah Amiouny by friends and family. Eligibility: Awarded to a full-time undergraduate student in the Political Science Department.

Sociology and Anthropology

Tammy Bedford and Gary Byng Memorial Endowment Bursary: Established in 1996 by the parents of Tammy Bedford in memory of both Tammy Bedford and her friend Gary Byng. Eligibility: Awarded to deserving undergraduate students in the Faculty of Arts and Science, Department of Sociology and Anthropology, pursuing a Major in Sociology with an interest in Third World countries.

Concordia University Undergraduate Field Work Association Bursary:* Established in 1996 by the Concordia Undergraduate Field Work Association to provide in-course bursaries to deserving undergraduate students who are intending to undertake field work. Eligibility: Awarded to deserving students pursuing a Major, Honours or Specialization program in these participating departments: Classics, Sociology or Anthropology. Students must have completed 18 credits and must submit a proposal along with the in-course bursary application form. A minimum GPA of 3.0 is required.

Open to Students in the Faculty of Commerce and Administration

Theodore Ronis Memorial Bursary: Established through the National Council of Jewish Women of Canada and by his friends, in memory of the late Theodore Ronis to honour his friendship. Eligibility: Awarded annually to a deserving student studying (preferably, but not necessarily) towards a Bachelor of Commerce degree. Preference will be given to a male student.

Jean-Paul Vallée/Royal LePage Bursary: Established in 1987 by family, friends, and associates to honour the late Jean-Paul Vallée. Eligibility: Awarded annually to a full-time undergraduate student.

Accountancy

Professor James Gilchrist Finnie Bursary: Established in 1976 by faculty and staff of Sir George Williams University, former students, colleagues, and business friends in recognition of Mr. Gilchrist Finnie's

many years of devoted service to the University. Eligibility: Awarded annually, on the basis of merit and/or need, to an undergraduate student who is pursuing a Major in Accountancy, and entering his/her final year. Selection shall be at the discretion of the In-course Bursary Selection Committee.

Maurice Gold Memorial Bursary: Established by family, friends, and colleagues of Dr. Maurice Gold, a former faculty member of the Department of Accountancy. Eligibility: Awarded to an undergraduate student pursuing a Major in Accountancy who is deserving, both academically and financially.

Nathan H. Messer Bursaries: Established in 1971 by business associates and clients of Nathan H. Messer on the occasion of his retirement. Eligibility: Two bursaries are awarded annually to financially deserving students entering their final year, who are pursuing a Major in Accountancy. Awards are made following consultation with the Chair of the Department.

Schwartz Levitsky Feldman Bursary: An annual in-course bursary established through the generosity of the Schwartz Levitsky Feldman accounting firm. Eligibility: This non-renewable bursary is available to second- or third-year full-time students pursuing a Major in Accountancy. The bursary is granted on the basis of financial need and good academic standing.

Administration

Institute of Chartered Secretaries and Administrators in Canada (Québec Branch) Bursary: Established in 1995 by the ICSAC for a three-year period to recognize outstanding students. Eligibility: Open to all undergraduate Administration Majors.

Open to Students in the Faculty of Engineering and Computer Science

Engineering and Computer Science Graduating Class Bursary: Established in 2000 through the generosity of participating Engineering and Computer Science students from 1994 to 1999 to provide for one bursary in the Faculty of Engineering and Computer Science. Eligibility: Open to deserving Canadian and Permanent Resident students in Bachelor's programs in the Faculty of Engineering and Computer Science, who have completed at least one year of full-time studies (for students who have registered in the fall, one semester of full-time study). Preference will be given to students who have participated in ECA (Engineering and Computer Science Association) activities, as demonstrated through their personal statement on the In-Course Bursary application form.

ITT Flygt Bursary in Engineering: Created in 2000 through the generosity of ITT Flygt to support and encourage deserving Engineering students in Concordia's Faculty of Engineering and Computer Science. Eligibility: Awarded on the basis of financial need and academic merit, to Canadian and Permanent Resident students in Engineering, who have completed at least one year of full-time undergraduate studies.

Myer F. Pollock Bursary: Established in 1971 by Mrs. Bess Pollock on the occasion of her husband's 60th birthday. Eligibility: Open to all students within the Faculty of Engineering.

Industrial Engineering

Nissan Canada Inc. Award in Automotive Engineering: Established in 1999 through the generosity of Nissan Canada Inc., for undergraduate students in the Faculty of Engineering and Computer Science in the field of Automotive Engineering. Eligibility: Available to all Engineering and Computer Science students who are entering their final year of full-time studies in Mechanical or Industrial Engineering. Applicants must be active members of Concordia's Student Chapter of the Society for Automotive Engineers (SAE), who have participated or are participating in SAE student competitions.

Mechanical Engineering

The AlliedSignal Aerospace Inc. Bursary: Established in 1998 to provide for one annual in-course bursary by AlliedSignal, which is one of the world's premier companies, distinctive and successful in the aerospace industry. Eligibility: This non-renewable bursary is granted by the University to a second- or third-year full-time undergraduate student in Mechanical Engineering. The award is granted on the basis of financial need to a student in good academic standing.

Nissan Canada Inc. Award in Automotive Engineering: Established in 1999 through the generosity of Nissan Canada Inc., for undergraduate students in the Faculty of Engineering and Computer Science in the field of Automotive Engineering. Eligibility: Available to all Engineering and Computer Science students who are entering their final year of full-time studies in Mechanical or Industrial Engineering. Applicants must be active members of Concordia's Student Chapter of the Society for Automotive Engineers (SAE), who have participated or are participating in SAE student competitions.

Open to Students in the Faculty of Fine Arts

Faculty of Fine Arts Development Fund Bursaries: The Faculty of Fine Arts offers a number of bursaries, made possible by donations to its Faculty Development Fund. Eligibility: Open to students in the Faculty of Fine Arts who are financially deserving. Equal distribution along gender lines is desired. Selection is done by the Fine Arts Department from among those students who have applied for an in-course bursary.

Bruno and Stella Lebel Fine Arts Bursary: Established in 1981 in memory of the late Bruno and Stella Lebel. Eligibility: Awarded to a student in the Faculty of Fine Arts on the basis of financial need and high academic standing.

Cinema

André Bazin/George Sadoul Film Award: One of several staff- and faculty-supported awards, this was established in 1979 to honour a student in the Department of Cinema. Eligibility: Awarded annually to deserving students for outstanding work in Film Studies. This award is presented at the year-end screening within the Cinema Department.

b.b.c. Ani-Award: One of several staff- and faculty-supported awards, this was established in 1991 to honour a student in the Department of Cinema. Eligibility: Contact the Department of Cinema for further information: (514) 848-4666.

Jean-François Bourassa Memorial Bursary: Established in 1996 by family, friends, and colleagues in memory of Jean-François Bourassa, a talented film-maker and former student in the Department of Cinema at Concordia University. Eligibility: Awarded annually to a second-year film production student who has demonstrated an outstanding and creative use of cinematography in film-making, and has declared an interest in pursuing a professional career as a director of cinematography.

Cinar Award: One of several staff- and faculty-supported awards, this was established to honour a student in the School of Cinema. Eligibility: Contact the School of Cinema for further information: (514) 848-4666.

Matthew Czerny Award: This award commemorates a young man who combined striking talent with a generous, collaborative personality. He died in a climbing accident in September 1995, just before his last year of studies towards his degree in film production. Eligibility: Granted to support the production of a documentary film by a second- or third-year Cinema student. Judging is to be based on proposed scripts. Selection is done exclusively by the School of Cinema.

William K. Everson Award: One of several staff- and faculty-supported awards, this was established to honour a student in the Film Studies Program. Eligibility: Selection is done exclusively by the School of Cinema.

Philip Russel George Award: One of several staff- and faculty-supported awards, this was established to honour a student in the Film Production Program. Eligibility: Selection is done exclusively by the School of Cinema.

Zlatko Grgic Award: One of several staff- and faculty-supported awards, this was established to honour a student in the Film Animation Program. Eligibility: Selection is done exclusively by the School of Cinema.

Mel Hoppenheim Award: This annually funded award is made possible by the donation of Mr. Mel Hoppenheim, President of Cité du Cinéma. This award has been granted since 1985 in recognition of an outstanding student in the Film Production Program. Eligibility: Selection is done exclusively by the School of Cinema.

Contemporary Dance

James Saya Memorial Bursary: Established in 1991 by the Contemporary Dance Department in memory of a colleague and friend, James Saya. Eligibility: Awarded annually to a full-time undergraduate student whose Major is Contemporary Dance and who is entering his/her second or third year of study in the program. The recipient will be selected by the Chair of the Department in consultation with the Financial Aid and Awards Office.

Studio Arts

George Balcan Bursary: Created through the donations of George Balcan's wife and his friends to mark his 60th birthday in 1991. George Balcan spent more than 25 years as the morning host of CJAD radio. He is also an accomplished pastel artist and a member of the Canadian Pastel Society. His works have won numerous awards and are included in several significant Canadian collections. Eligibility: The recipient is selected based on the recommendation from the Chair of the Department of Studio Arts and whose Major is Painting and Drawing.

John Jackman Bursary: Established by Mrs. Beth Swayne Jackman in memory of her husband, John Jackman, a former student in the Faculty of Fine Arts. Eligibility: Awarded annually to a student in a visual arts Major relating to Studio Art practice. The award will be given on the basis of scholastic achievement, demonstration of talent in the discipline of study, and financial need.

Jack Lehman Bursary: Established in 1987 by the friends of Jack Lehman on the occasion of his 60th birthday. Eligibility: Open to all first-year students in the Ceramics section of the Department of Studio Arts.

Alfred Pinsky Emergency Bursary: Established by a group of anonymous donors in 1987 to assist financially needy and deserving students in dire need of financial help, this bursary allows students who

may otherwise withdraw from school due to a lack of resources to continue their education at Concordia University. This bursary is reserved for crisis situations. Eligibility: Recipients are recommended by the Department of Studio Arts. This award is not open for competition or application.

Sarah Singer Memorial Bursary: Established by Dr. Abraham Singer in memory of his sister Sarah, an artist and graduate of the Faculty of Fine Arts of Concordia University. This bursary is to help a financially and academically deserving student studying in the Department of Studio Arts. Eligibility: Awarded to a full-time undergraduate student in the Department of Studio Arts.

Theatre

Jeffrey David Skowronski Dramatic Arts Bursary: Established in 1988 by the Skowronski Family in memory of their son, Jeffrey David. Eligibility: Awarded annually to a full-time undergraduate student whose Major is Theatre.

Loyola Foundation Inc. Bursaries

Several endowment funds which originated from donors wishing to support Loyola College allowed for the establishment of these bursaries. Their donations were turned over to the Loyola Foundation shortly after the Foundation's creation in 1973 to be used for objectives, activities and purposes that would "foster and maintain the tradition and spirit of Loyola College," irrespective of the major structural changes anticipated at the time. It is the continuing wish of the Foundation that these bursaries encourage and support the education of persons of good character who respect and share the tradition and spirit of Loyola College.

The awards funded by the Loyola Foundation consist of a variable number of bursaries of \$1,000 each. The bursaries shall be subject to annual renewal.

This endowment is the amalgamation of the following awards:

The Dr. William Atherton History Prize Fund	The Susan Langley Fund
The Ursula Carling Fund	The Loyola Evening Students' Fund
The Mrs. John Moriarty Fund	The Professors McGuigan and McPhee Fund
The St. Ignatius Men's Association Fund	The Francis J. Dowling Fund
The Clive Moore Memorial Fund	The Lilley F. Barry Fund
The George V. Uihlein Jr. Memorial Fund	The Kenneth J. McArdle Memorial Fund
The O'Hearn and O'Connor History Prize Fund	The Charles J. Brown Memorial Fund
The Loyola Alumni Association Fund	The Gordon Bennett Memorial Fund
The James Webber Trust Fund	The Avon Products of Canada Fund
The Clarence G. Smith Memorial Fund	

Eligibility:

- available to full-time students in an undergraduate program at Concordia University who are, themselves, or who have an ascendant who was a graduate of Loyola High School or Loyola College;
- required presentation of a duly completed application form establishing financial need in the judgement of Concordia University;
- renewable annually on a new application subject to continuing full-time involvement, satisfactory academic progress and continuing financial need in the judgement of Concordia University.

Application:

Interested candidates must submit a completed University In-course Bursary application form along with proof of relationship with the ascendant.

Concordia University Senior Student Bursary Program

Concordia University has, for many years, endeavoured to facilitate access to university studies for senior citizens. The University is happy to offer bursaries to help defray the tuition cost of Senior students' studies. These bursaries are non-renewable, but recipients may apply in successive years.

- Eligibility: Applicants must be 65 years of age or over, and registered as full- or part-time students at Concordia University. Senior Independent, senior undergraduate or graduate students are eligible for this bursary.
- Value of Bursaries: The value is \$25 per credit for each level of study.
- Approval Process: Recipients will be selected on the basis of progress in their studies, and a personal statement indicating their financial need and how this bursary would be of assistance to them.
- Application Deadline: Application forms are available at the Financial Aid and Awards Office, and must be returned to this office by the following deadlines:

October 1 for students beginning or continuing their studies in the Fall Term.

February 1 for students beginning their studies in the Winter Term, or for those who become eligible during the Fall Term.



graduate programs

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400 GRADUATE PROGRAMS

Dean
CLAUDE BÉDARD

Administrative Director
JOANNE BEAUDOIN

Associate Deans
ELIZABETH J. SACCÁ
JAMES E. JANS

<i>Location</i>	School of Graduate Studies 1455 de Maisonneuve Blvd West Montréal, Québec H3G 1M8	The office is located at: 2145 Mackay Street (514) 848-3800
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SCHOOL OF GRADUATE STUDIES

The graduate programs offered by the University are divided into doctoral, master's, diploma and certificate programs. Doctoral programs offer students the opportunity to carry out fundamental and applied research. The results of this research are presented in the form of a thesis containing an original contribution to knowledge. Master's and doctoral theses are defended in public examinations.

The length and specific format of a doctoral thesis is discipline dependent. All doctoral programs require the passing of comprehensive examinations and a minimum of 90 credits of study. At the master's level, the University offers a variety of thesis and non-thesis options. All master's programs require a minimum of 45 credits. Some master's programs also have a comprehensive examination.

The academic goals of the graduate diploma programs are somewhat different from those of doctoral and master's programs. They are designed either to offer a further specialization in a field or discipline already studied at the undergraduate level, or they provide the introduction to a new field of study or discipline, with the express intent to develop some level of specialized knowledge. A graduate diploma consists of a minimum of 30 credits and normally a maximum of 33 credits. Diploma programs do not require a thesis, although a graduating essay, project or report may be required. Diploma programs may require a comprehensive examination.

Graduate certificates are designed to use existing departmental graduate resources to serve a professional clientele which is seeking an upgrading and advanced graduate training over a short time frame. The normal academic base for graduate certificates is the graduate courses presently offered by an academic department, configured in a way to serve the needs of the clientele. The focus of the certificate program should be directed to the needs of the professional clientele; it will be specialized in scope rather than being of a general nature.

With the exception of the special individualized doctoral and master's programs and the Humanities doctoral program, all graduate programs offered by the University are administered by a particular academic department or program in one of the four Faculties of the University, under the general supervision of the Council of the School of Graduate Studies and its chair, the Dean of Graduate Studies and Research. All graduate programs are described in the School of Graduate Studies Calendar. Each description outlines the full-time faculty involved in the program, the objectives of the program, and the research interests of the faculty. Admission requirements, application procedures, degree requirements and program options are specified. In most cases, courses are given in the late afternoon and evening, or in the evening only, making it possible for both full-time and part-time students to attend. Please contact the graduate program director at the number indicated for further information.

Effective June, 1994, students may choose to receive their degrees in either the new gender neutral nomenclature of Baccalaureate, Magisteriate, and Doctorate or the traditional nomenclature of Bachelor, Master, and Doctor.

Department of Applied Linguistics

MA	Palmer Acheson	848-2448
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Department of Applied Human Sciences

MA	Dorothy Markiewicz	848-2268
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Department of Art Education and Creative Arts Therapies

MA & PhD (Art Education)	Richard Lachapelle	848-4783
MA in Creative Arts Therapies	Leland Peterson	848-4643

Department of Art History MA & PhD	Joan Acland	848-4696
Department of Biology MSc & PhD	Paul J. Albert	848-8729
Department of Building, Civil & Environmental Engineering Graduate Certificate, MAsC, MEng & PhD (Building) Graduate Certificate, MAsC, MEng & PhD (Civil)	Fariborz Haghighat Fariborz Haghighat	848-3192 848-3192
Department of Chemistry and Biochemistry MSc & PhD	Justin B. Powlowski	848-3339
Faculty of Commerce and Administration MBA Executive MBA AMBA (Airline and Aviation) MSc (Administration) PhD (Administration) Diploma in Accountancy Diploma in Administration Diploma in Sport Administration Graduate Certificates in DIA/DSA	Lea Prevel Katsanis Alan Hochstein Dale D. Doreen Gary W. Johns Gary W. Johns Gail Fayerman Clarence Bayne Clarence Bayne Clarence Bayne	848-2770 848-2932 848-2930 848-2914 848-2914 848-2774 848-2976 848-2976 848-2976
Department of Communication Studies MA (Media Studies) PhD (Communication) Diploma in Communication Studies	Maurice Charland Kim Sawchuk Hal Thwaites	848-2546 848-2557 848-2539
Department of Computer Science MCompSc & PhD Diploma in Computer Science	Tien D. Bui J. William Atwood	848-3014 848-3046
Department of Economics MA & PhD Diploma in Economic Policy	M. Gregory Leblanc M. Gregory Leblanc	848-3911 848-3911
Department of Education MA (Educational Studies) MA (Educational Technology) PhD (Educational Technology) MA (Child Study) Diploma in Adult Education Diploma in Instructional Technology	Ailie Cleghorn David Wells Gary Boyd Sandra Weber Paul Bouchard David Wells	848-2041 848-2039 848-2044 848-2025 848-2011 848-2039
Department of Electrical and Computer Engineering MASc, MEng & PhD	Asim J. Al-Khalili	848-3119
Faculty of Engineering and Computer Science MEng (Aerospace)	J.V. Svoboda	848-3150
Department of English MA	Nicola Nixon	848-2359
Département d'études françaises MA (Traductologie) Diploma in Translation	Sherry Simon Paul Bandia	848-7500 848-7500
Faculty of Fine Arts MA (Film Studies) MFA (Studio Arts) Diploma in Advanced Music Performance Studies	Mario Falsetto Gisèle Amantea Liselyn Adams	848-4634 848-4607 848-4716
Department of Geography MA (Public Policy and Public Administration Geography Option) Diploma in Environmental Impact Assessment Graduate Certificate in Urban Studies	I. Max Barlow Judith Patterson John P. Zacharias	848-2062 848-2050 848-2056

Department of History MA & PhD	Norman Ingram	848-2436
Humanities Program PhD	James E. Jans	848-2096
Department of Journalism Diploma in Journalism	Linda Kay	848-2469
Department of Mathematics and Statistics MA, MSc & PhD MTM (Master/Magisteriate in the Teaching of Mathematics)	Chantal David Anna Sierpiska	848-3227 848-3239
Department of Mechanical Engineering MAsc, MEng & PhD	Rafik A. Neemeh	848-3146
Department of Philosophy MA	Sheila Mason	848-2506
Department of Physics MSc & PhD	J. David Cheeke	848-3292
Department of Political Science MA (Public Policy and Public Administration)	Brooke Jeffrey	848-2131
Department of Psychology MA PhD	Rick Gurnsey Anna-Beth Doyle	848-2243 848-7538
Department of Religion MA (History and Philosophy of Religion) MA (Judaic Studies) PhD	Michael D. Oppenheim Michael D. Oppenheim Frederick B. Bird	848-2067 848-2067 848-2070
Department of Sociology and Anthropology MA (Cultural Anthropology) MA (Sociology)	Christine Jourdan Christine Jourdan	848-2169 848-2169
Department of Theological Studies MA (Theological Studies)	Christophe Potworowski	848-2481
Special Individualized Programs (S.I.P.) MA & PhD	Elizabeth J. Saccá	848-3889
School of Community and Public Affairs Diploma in Community Economic Development	Michael Chervin	848-3965



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January	February	March	April
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15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21		
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28		
29	30						27	28	29	30	31			24	25	26	27	28	29	30	29	30	31						